

ISSUE REPORT

# Investing In America's Health:

A STATE-BY-STATE LOOK AT PUBLIC HEALTH  
FUNDING AND KEY HEALTH FACTS



MARCH 2012

PREVENTING EPIDEMICS.  
PROTECTING PEOPLE.

## ACKNOWLEDGEMENTS

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IS A NON-PROFIT, NON-PARTISAN  
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## REPORT AUTHORS

### Jeffrey Levi, PhD.

*Executive Director*  
Trust for America's Health and  
*Associate Professor in the Department of Health*  
*Policy*  
The George Washington University  
School of Public Health and Health Ser-  
vices

### Laura M. Segal, MA

*Director of Public Affairs*  
Trust for America's Health

### Rebecca St. Laurent

*Health Policy Research Manager*  
Trust for America's Health

### Albert Lang

*Communications Manager*  
Trust for America's Health

# Introduction

**F**or too long, the country has focused on treating people after they become sick instead of preventing diseases before they occur.

Investing in disease prevention is the most effective, common-sense way to improve health — helping to spare millions of Americans from developing preventable illnesses, reduce health care costs and improve the productivity of the American workforce — so we can be competitive with the rest of the world.

Tens of millions of Americans are currently suffering from preventable diseases such as cancer, heart disease and diabetes. And, today's children are in danger of becoming the first generation in American history to live shorter, less healthy lives than their parents.

The nation's public health system is responsible for improving the health of Americans. But, the public health system has been chronically underfunded for decades. Analyses from the Institute of Medicine (IOM), The New York Academy of Medicine (NYAM), the U.S. Centers for Disease Control and Prevention (CDC) and a range of other experts have found that federal, state and local public health departments have been hampered due to limited funds and have not been able to adequately carry out many core functions, including programs to prevent disease and prepare for health emergencies.<sup>1</sup>

In this report, the Trust for America's Health (TFAH) examines public health funding and key health facts in states around the country.

Federal funding for public health has remained at a relatively flat and insufficient level for years. The budget for CDC has decreased from a high of \$6.62 billion in 2005 to \$6.32 billion in 2011.<sup>2</sup>

At the state and local levels, public health budgets have been cut at drastic rates in recent years. According to a TFAH analysis, 40 states decreased their public health budgets from FY 2009-10 to FY 2010-11, 30 states decreased budgets for a second year in a row and 15 for three years in a row. In FY 2010-11, the median state funding for public health was \$30.09 per capita, ranging from a high of \$154.80 in Hawaii to a low of \$3.45 in Nevada. From FY 2008 to FY 2011, the median per capita state spending decreased from \$33.71 to \$30.09. A recent study conducted by the National Association of County and City Health Officials (NACCHO) found significant cuts to programs, workforce and budgets at local health departments (LHDs) around the country. Since 2008, LHDs have lost a total of 34,400 jobs due to

layoffs and attrition.<sup>3</sup> Combined state and local public health job losses total 49,310 since 2008.<sup>4</sup> LHDs continue to struggle with budget cuts. In July, 2011, nearly half of LHDs reported reduced budgets, which is in addition to 44 percent that reported lower budgets in November 2010.<sup>5</sup> In addition, more than 50 percent of LHDs expect cuts to their budgets in the upcoming fiscal year.

## ■ Differences In Federal Funding For States:

Federal public health spending through CDC averaged out to only \$20.28 per person in FY 2011. And the amount of federal funding spent to prevent disease and improve health in communities ranged significantly from state to state, with a per capita low of \$14.20 in Ohio to a high of \$51.98 in Alaska.

■ **Differences in State Funding:** This report also examined state funding and found that the median amount in state fiscal years 2010-2011 for public health equaled only \$29.80 per person, ranging from a low of \$3.45 per person in Nevada to a high of \$154.80 per person in Hawaii. Regionally there were large differences in state funding.

■ **Differences In Health Statistics By State:** The report finds major differences in disease rates and other health factors in states around the country. For instance, only 5.6 percent of residents of Massachusetts are uninsured compared to almost 25 percent in Texas, and less than 10 percent of adults in Utah are current smokers while almost 27 percent report smoking in West Virginia.

There is little strategic rationale for the differences in funding — and therefore, for the way public health is funded in America. The federal funds are a mixture of population-based formula grant programs, incidence or prevalence based formulas, and a series of competitive grants — where some states receive funding and others do not. Because of insufficient funding for the CDC, many states submit competitive grants ("approved but unfunded" applications) that cannot be awarded. But in most cases, there is no officially defined mode or coordination for targeting or strategically focusing the funds. State and local funding varies dramatically based on the structure of a state's public health department. Some departments are centralized, while others are decentralized where responsibilities rest more on local departments than at the

state level. However, states and localities also place different priorities on public health, which also accounts for differences in the funding. These state-by-state comparisons do not include county or city revenues that are generated to support local health departments, which are also quite variable.

This report examines some key disease rates in combination with health spending to help further the discussion about what the right amount of

public health funding should be in order to have a real impact on reducing disease rates nationally.

Overall, the report concludes that a sustained and sufficient level of investment in prevention is essential to improving health in the United States, and that differences in disease rates will not be changed unless an adequate level of funding is provided to support public health departments and disease prevention efforts.

## WHERE YOU LIVE SHOULD NOT DETERMINE HOW HEALTHY YOU ARE

Where you live, learn, work and play make a big difference in how healthy you are.

A range of factors, like education, employment, income, family and social support, community safety and the physical environment, impact our health.

In many communities, healthy choices are easy choices for their residents. In these communities, there are plenty of gyms, safe places to jog and community recreation centers with gleaming swimming pools and sports fields. The children play and exercise in well maintained parks and have access to affordable nutritious foods. But in many other American communities, there are obstacles to healthy living:

- Parks and playgrounds are littered, broken, or unsafe.
- There are few places to get out and exercise — some communities don't even have sidewalks for walking.

- School meals are low in nutritional value, school vending machines sell junk food, and students don't get regular physical education classes.

- Access to fruit and vegetables is limited because there are no supermarkets.

- Dilapidated housing, crumbling schools, abandoned factories and freeway noise and fumes cause illness and injury.

The poor overall conditions cause higher levels of obesity and chronic disease, including diabetes, heart disease and cancer, leading to higher health care costs.

One major factor in the health of a community is whether or not they have a strong public health system. Public health departments can help improve the health of communities, since they are responsible for finding ways to address the systemic reasons why some communities are healthier than others — and for developing policies and programs to remove obstacles that get in the way of making healthy choices possible.

## NATIONAL PREVENTION STRATEGY AND PREVENTION FUND

The Affordable Care Act included the creation of a National Prevention Strategy — to set national goals and identify effective strategies for improving health in the United States — and a Prevention Fund — to provide communities around the country with more than \$16 billion over the next 10 years to invest in effective, proven prevention efforts, like childhood obesity prevention and tobacco cessation.

- The Prevention and Public Health Fund will invest approximately \$13 billion over the next 10 years in proven, effective programs to prevent disease and injury. The Fund will:
  - ✓ Bring common sense into our health care system by helping people to stay healthy and not get sick in the first place.
  - ✓ Help Americans to make healthier choices and take personal responsibility for their own health and the health of their families and children.
  - ✓ Reduce health care costs for businesses and families; prevent suffering; save millions of lives; keep Americans healthy and at work; and improve the quality of life for all.
- The Fund supports prevention efforts at the community level to:
  - ✓ Reduce tobacco use.
  - ✓ Expand opportunities for recreation and exercise.

- ✓ Improve nutrition by increasing access to fresh fruits and vegetables and farmers markets, and helping kids to eat healthier meals and snacks in schools.
- ✓ Expand mental health and injury prevention programs.
- ✓ Improve prevention services in low-income and underserved communities.

- The Fund improves state and local health departments to:
  - ✓ Provide flu and other immunizations.
  - ✓ Protect our food, air and water.
  - ✓ Fight infectious diseases.

- The Fund helps modernize disease outbreak and containment capabilities to:
  - ✓ Expand the workforce for public health laboratories.
  - ✓ Provide modernized equipment and technology to labs to protect us from disease outbreaks and other threats.

- The Fund supports science and research to:
  - ✓ Develop more and even better ways to prevent disease and keep families and communities safe and healthy.



# Funding for Public Health

Public health programs are funded through a combination of federal, state and local dollars.

Each level of government has different, but important responsibilities for protecting the public's health. While this report focuses primarily on federal funding to states, it also provides information about state funding.

TFAH analyzes federal and state funding for public health based on the most complete financial data currently available. There is a sig-

nificant delay from the time when a President proposes a fiscal year budget, to when appropriations legislation is signed into law, to the time when the funds are disbursed. Therefore, TFAH uses FY 2011 data for this analysis, which is the budget year for which the data is most complete and accurate.

## 1 SECTION



## A. FEDERAL INVESTMENT IN PUBLIC HEALTH

### Federal Funding for States from the U.S. Centers for Disease Control and Prevention

Summary of CDC Dollars — FY 2011			
State	CDC Total (All Categories)	CDC Per Capita Total	CDC Per Capita Ranking
Alaska	\$37,565,882	\$51.98	1
Vermont	\$23,793,896	\$37.98	2
Wyoming	\$18,832,635	\$33.15	3
Rhode Island	\$34,534,605	\$32.85	4
New Mexico	\$68,198,368	\$32.75	5
South Dakota	\$25,352,336	\$30.76	6
Montana	\$30,411,958	\$30.47	7
North Dakota	\$20,450,806	\$29.90	8
Delaware	\$25,875,080	\$28.52	9
Maine	\$35,171,087	\$26.48	10
Maryland	\$152,500,924	\$26.17	11
Hawaii	\$35,197,624	\$25.60	12
Mississippi	\$74,776,585	\$25.11	13
West Virginia	\$45,821,729	\$24.70	14
Washington	\$168,425,887	\$24.66	15
Nebraska	\$45,411,154	\$24.64	16
New York	\$473,289,511	\$24.31	17
Arkansas	\$69,509,960	\$23.66	18
Oklahoma	\$89,543,799	\$23.62	19
Louisiana	\$107,864,995	\$23.58	20
Georgia	\$228,752,481	\$23.31	21
Idaho	\$35,630,024	\$22.48	22
New Hampshire	\$28,832,290	\$21.87	23
Massachusetts	\$142,233,727	\$21.59	24
California	\$796,819,448	\$21.14	25
Nevada	\$56,400,106	\$20.71	26
South Carolina	\$96,384,322	\$20.60	27
Texas	\$523,439,104	\$20.39	28
NATIONAL AVERAGE \$20.28			
Iowa	\$61,380,321	\$20.04	29
Alabama	\$95,428,398	\$19.87	30
Connecticut	\$69,866,332	\$19.51	31
Utah	\$54,889,856	\$19.48	32
Arizona	\$126,192,930	\$19.47	33
Illinois	\$250,525,016	\$19.47	33
Colorado	\$99,303,655	\$19.41	35
Kansas	\$52,629,741	\$18.33	36
North Carolina	\$176,829,426	\$18.31	37
Oregon	\$70,645,834	\$18.25	38
Minnesota	\$96,655,652	\$18.08	39
Michigan	\$174,382,879	\$17.66	40
Kentucky	\$77,011,820	\$17.63	41
Tennessee	\$112,622,362	\$17.59	42
Missouri	\$102,906,834	\$17.12	43
New Jersey	\$149,232,028	\$16.92	44
Wisconsin	\$93,798,851	\$16.42	45
Florida	\$305,261,911	\$16.02	46
Pennsylvania	\$192,549,603	\$15.11	47
Indiana	\$97,768,792	\$15.00	48
Virginia	\$116,156,922	\$14.35	49
Ohio	\$163,918,804	\$14.20	50
District of Columbia	\$88,786,605	N/A	N/A
<b>U.S. TOTAL</b>	<b>\$6,319,728,895</b>	<b>\$20.28</b>	<b>NA*</b>

\*D.C. was not included in the per capita rankings because it receives different funding levels than the 50 states.

\*Total includes monies only for Washington, D.C. and U.S.

Federal public health spending through CDC averaged out to only \$20.28 per person in FY 2011. And the amount of federal funding spent to prevent disease and improve health in communities ranged significantly from state to state, with a per capita low of \$14.20 in Ohio to a high of \$51.98

in Alaska. The amount of funding also ranged regionally, with the Midwest averaging the low of \$17.65 and the West averaging the high of \$21.94. The Northeast and South fell into the middle at \$20.70 and \$19.91 respectively.

## Federal Funding for States from the Health Resources and Services Administration

Summary of HRSA Dollars — FY 2011			
State	HRSA Total (All Programs)	HRSA Per Capita Total (All Programs)	HRSA Per Capita Ranking
Alaska	\$59,949,156	\$82.95	1
Hawaii	\$64,454,665	\$46.88	2
New Mexico	\$94,041,564	\$45.16	3
Wyoming	\$23,419,069	\$41.22	4
Montana	\$40,961,605	\$41.04	5
West Virginia	\$75,730,030	\$40.82	6
Massachusetts	\$256,520,190	\$38.94	7
Maryland	\$209,561,015	\$35.96	8
Rhode Island	\$36,593,542	\$34.81	9
Maine	\$46,016,429	\$34.65	10
Vermont	\$20,750,922	\$33.13	11
New York	\$617,057,839	\$31.70	12
Louisiana	\$144,770,300	\$31.64	13
Delaware	\$28,615,714	\$31.55	14
Washington	\$214,720,935	\$31.44	15
Idaho	\$47,854,484	\$30.19	16
Oregon	\$115,271,624	\$29.77	17
Mississippi	\$88,436,075	\$29.69	18
South Dakota	\$23,859,070	\$28.95	19
Colorado	\$143,696,964	\$28.08	20
Connecticut	\$98,247,575	\$27.44	21
Alabama	\$126,347,908	\$26.31	22
Ohio	\$292,343,980	\$25.32	23
Arkansas	\$73,515,226	\$25.02	24
Missouri	\$148,876,171	\$24.77	25
South Carolina	\$113,727,303	\$24.30	26
Illinois	\$309,282,921	\$24.03	27
Tennessee	\$152,442,292	\$23.81	28
<b>NATIONAL AVERAGE \$23.75</b>			
North Dakota	\$15,227,478	\$22.26	29
Kentucky	\$96,796,214	\$22.15	30
Nebraska	\$40,733,955	\$22.11	31
Florida	\$421,186,942	\$22.10	32
California	\$827,850,412	\$21.96	33
Iowa	\$61,751,878	\$20.17	34
Pennsylvania	\$256,684,149	\$20.14	35
Georgia	\$195,112,699	\$19.88	36
North Carolina	\$181,940,453	\$18.84	37
Virginia	\$152,245,201	\$18.80	38
Arizona	\$121,235,587	\$18.70	39
Oklahoma	\$70,897,793	\$18.70	39
New Jersey	\$162,225,986	\$18.39	41
Utah	\$50,963,666	\$18.09	42
Michigan	\$177,946,689	\$18.02	43
New Hampshire	\$22,335,235	\$16.94	44
Texas	\$418,058,649	\$16.28	45
Indiana	\$100,625,322	\$15.44	46
Kansas	\$39,250,735	\$13.67	47
Wisconsin	\$78,053,432	\$13.67	47
Minnesota	\$68,959,213	\$12.90	49
Nevada	\$34,763,422	\$12.77	50
District of Columbia	\$139,185,860	N/A*	N/A*
<b>US Total</b>	<b>\$7,401,095,538</b>	<b>23.75**</b>	<b>NA**</b>

\*D.C. was not included in the per capita rankings because total funding for D.C. includes funds for a number of national organizations.

\*\*The US total reflects HRSA grants to all states and D.C.

Health Resources and Services Administration (HRSA) grants to states averaged out to only \$23.75 per person in FY 2011. And the amount of funding spent for key health program areas ranged significantly from state to state, with a per capita low of \$12.77 in Nevada to a high of \$82.95 in Alaska. The amount of funding also ranged regionally, with the Midwest averaging a low of \$20.20 and the Northeast averaging the high of \$27.31. The West and South fell into the middle at \$25.24 and \$22.09 respectively.

Information on the amount of federal funding each state receives for a range of public health programs is available online at [www.healthymamericans.org](http://www.healthymamericans.org) along with key health facts for each state. The online State Data pages contain funding information on programs from the U.S. Centers for Disease Control and Prevention (CDC), the Health Resources and Services Administration (HRSA) and the Office of the Assistant Secretary for Preparedness and Response (ASPR). A full list of the funding by category is available in Appendices E-F; and a list of key health statistics by state is available in Appendices B-D. Notes on data and methodology are available in Appendix A.

HRSA distributes approximately 90 percent of its funding in grants to states and territories, public and private health care providers, health professions training programs and other organizations.<sup>6</sup> HRSA's funding is not distributed on a strictly per capita basis. The bulk of HRSA

funds are in its two largest programs, the community and migrant health centers and the Ryan White Act HIV programs, and these dollars are awarded on a competitive basis and/or based on disease burden.

Approximately 75 percent of CDC's budget is distributed to states, localities and other public and private partners to support services and programs. Some of CDC's funding is based on the number of people in a state or on a need-based formula for priority programs. Other funds are based on competitive grants. States can apply to CDC for funding for specific program areas. Often in these cases, not all states that apply for funds receive them because there are insufficient funds appropriated to allow all states to receive grants.

Public health funding from CDC has been flat in recent years. After converting each year into 2011 dollars, CDC funding shows 2005 as the peak of distribution during the past six years. CDC distributed \$7.18 billion in 2005, decreased significantly to \$5.66 billion in 2007, and in 2008 the amount remained flat at \$5.61 billion. A slight increase in funds can be seen in 2009 and 2010 at \$6.21 billion and \$6.47 billion respectively. In 2011 the funds remain mostly constant at \$6.32 billion.

Currently, most of the federal funding from CDC for states is distributed by categories.

### WHAT ARE THE FEDERAL GOVERNMENT'S PUBLIC HEALTH OBLIGATIONS?

In partnerships with states and localities, the federal government has an obligation to:

- Assure the capacity of all levels of government to provide essential public health services;
- Act when health threats may span many states, regions or the whole country;
- Act where the solution may be beyond the jurisdiction of individual states;
- Act to assist the states when they do not have the expertise or resources to mount an effective response in a public health emergency such as a natural disaster, bioterrorism, or an emerging disease;
- Facilitate the formulation of public health goals in collaboration with state and local governments and other relevant stakeholders;
- Be transparent and accountable for public health investments; and
- Disseminate innovation and best practices from state and local public health.

Source: Trust for America's Health. Public Health Leadership Initiative an Action Plan for Healthy People in Healthy Communities in the 21st Century.<sup>7</sup>



## B. STATE INVESTMENT IN PUBLIC HEALTH

### State Funding for Public Health

State Public Health Budgets			
State	FY 2010-2011	FY 10-11 Per Capita	Per Capita Ranking
Hawaii <sup>2</sup>	\$210,580,163	\$154.80	1
District of Columbia <sup>4</sup>	\$55,676,000	\$92.53	2
Idaho	\$122,845,700	\$78.37	3
Alaska <sup>2</sup>	\$55,550,000	\$78.21	4
West Virginia	\$132,295,059	\$71.40	5
New York	\$1,361,874,065	\$70.28	6
Vermont <sup>4</sup>	\$43,951,667	\$70.24	7
Alabama	\$335,488,409	\$70.19	8
California	\$2,415,831,000	\$64.85	9
Wyoming	\$33,852,718	\$60.06	10
Massachusetts	\$350,186,952	\$53.48	11
Arkansas	\$149,800,388	\$51.37	12
New Mexico <sup>4</sup>	\$105,036,600	\$51.01	13
Louisiana	\$225,294,657	\$49.70	14
Rhode Island <sup>4</sup>	\$50,815,757	\$48.28	15
Kentucky	\$192,860,700	\$44.44	16
Tennessee	\$278,401,400	\$43.87	17
Nebraska	\$72,785,962	\$39.85	18
Washington <sup>3</sup>	\$265,838,500	\$39.53	19
Virginia <sup>3</sup>	\$295,499,639	\$36.93	20
Colorado	\$183,551,436	\$36.50	21
Oklahoma <sup>1</sup>	\$135,791,000	\$36.20	22
Delaware <sup>2</sup>	\$28,791,300	\$32.06	23
Utah <sup>4</sup>	\$84,410,000	\$30.54	24
South Dakota <sup>4</sup>	\$24,558,841	\$30.16	25
MEDIAN \$30.09			
Maryland <sup>2,4</sup>	\$173,747,000	\$30.09	26
New Jersey	\$236,625,000	\$26.91	27
North Dakota <sup>3</sup>	\$16,939,076	\$25.18	28
Montana	\$24,180,994	\$24.44	29
Maine <sup>2</sup>	\$31,434,509	\$23.66	30
Florida <sup>2</sup>	\$441,688,341	\$23.49	31
Illinois	\$297,742,900	\$23.21	32
Connecticut <sup>2</sup>	\$79,551,713	\$22.26	33
Michigan <sup>3</sup>	\$205,877,200	\$20.83	34
Texas	\$521,636,021	\$20.74	35
South Carolina	\$81,225,679	\$17.56	36
Iowa <sup>4</sup>	\$51,790,348	\$17.00	37
Georgia	\$162,837,455	\$16.81	38
New Hampshire <sup>4</sup>	\$21,026,483	\$15.97	39
Ohio	\$175,566,137	\$15.22	40
Kansas	\$43,092,255	\$15.10	41
Pennsylvania <sup>2</sup>	\$190,456,000	\$14.99	42
North Carolina <sup>2</sup>	\$132,055,198	\$13.85	43
Oregon	\$52,141,850	\$13.61	44
Indiana	\$83,710,931	\$12.91	45
Minnesota <sup>2</sup>	\$64,815,000	\$12.22	46
Wisconsin	\$52,826,100	\$9.29	47
Mississippi <sup>2</sup>	\$25,875,597	\$8.72	48
Arizona	\$54,120,500	\$8.47	49
Missouri <sup>4</sup>	\$35,311,567	\$5.90	50
Nevada	\$9,307,757	\$3.45	51

Notes:

1 May contain some social service programs, but not Medicaid or CHIP.

2 General funds only.

3 Budget data taken from appropriations legislation.

4 State did not respond to the data check TFAH coordinated with ASTHO that was sent out October 26, 2011. States were given until November 18, 2011 to confirm or correct the information. The states that did not reply by that date were assumed to be in accordance with the findings.

Forty states decreased their public health budgets from FY 2009-10 to FY 2010-11, 30 states decreased budgets for a second year in a row, 15 for three years in a row. In FY 2010-11, the median state funding for public health was \$30.09 per capita, ranging from a high of \$154.80 in Hawaii to a low of \$3.45 in Nevada. From FY 2008 to FY 2011, the median per capita state spending decreased from \$33.71 to \$30.09.

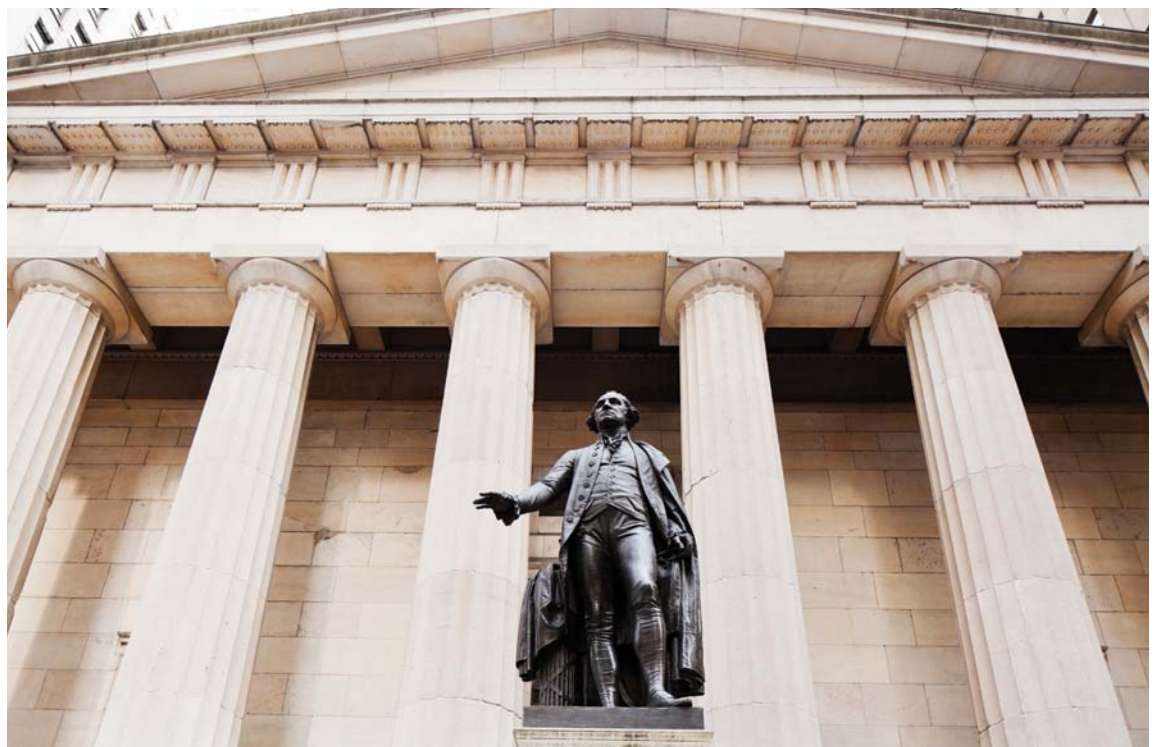
The majority of funding for public health comes from the state and local levels, although estimates of the percentages vary. In 2000, according to one analysis, state and local spending was 2.5 times the federal level, accounting for 70 percent of all public health spending.<sup>8</sup> According to this analysis, in 2000, combined state and local public health spending was \$44.29 per person while federal spending was \$17.77 per capita. Dramatic cuts to state and local funding since 2008 mean this ratio is likely to change significantly.

## WHAT ARE STATE AND LOCAL GOVERNMENTS' PUBLIC HEALTH OBLIGATIONS?

States and localities have an obligation to:

- Fulfill core public health functions such as diagnosing and investigating health threats, informing and educating the public, mobilizing community partnerships, protecting against natural and human-made disasters and enforcing state health laws;
- Provide relevant information on the community's health and the availability of essential public health services. This information should be integrated with reporting from local hospitals and health care providers to show how well public concerns and health threats are being addressed. These reports should also be publicly available and utilized by public health departments to work collaboratively with hospitals, physicians and others with a role in public health to set health goals;
- Work collaboratively with the multiple stakeholders who influence public health at the community level in designing appropriate programs and interventions that address key health problems and improve the health of the region; and
- Deal with complex, poorly understood problems by acting as "policy laboratories." States and localities are closer to the people and to the problems causing ill health.

Trust for America's Health. *Public Health Leadership Initiative an Action Plan for Healthy People in Healthy Communities in the 21st Century.*<sup>9</sup>



## C. LOCAL INVESTMENT IN PUBLIC HEALTH

There are approximately 2,800 local health departments in the United States serving a diverse assortment of populations ranging from less than 1,000 residents in some rural jurisdictions to around eight million people, as in the case of the New York City Department of Health.<sup>10</sup> Local health departments are structured differently in each state and may be centralized, decentralized or have a mixed function. Therefore, the level of responsibility and services provided by LHDs varies dramatically, and, correspondingly, the way resources are determined and allocated differs significantly.

A July 2011 study published in the journal *Health Affairs* found that increased spending by local public health departments can save lives currently lost to preventable illnesses.<sup>11</sup> Researchers Glen P. Mays and Sharla A. Smith mapped spending by local public health agencies from 1993-2005 with preventable mortality rates in each agency's respective jurisdiction. The report found:

- On average, local public health spending rose from \$34.68 per capita in 1993 to \$40.84 per capita in 2005 — an increase of more than 17 percent.
- For each 10 percent increase in local public health spending, there were significant decreases in infant deaths (6.9 percent drop), deaths from cardiovascular disease (3.2 percent drop), deaths from diabetes (1.4 percent drop) and deaths from cancer (1.1 percent drop).
- The 3.2 percent decrease in cardiovascular disease mortality cited above required local health agencies to spend, on average, an additional \$312,274 each year. In contrast, achieving the same reduction in deaths from cardiovascular disease by focusing on treatment and other traditional health care approaches would require an additional 27 primary care physicians in the average metropolitan community. To put this comparison in perspective, the median salary for a

single primary care physician was \$202,392 in 2010 — as a result, 27 primary care physicians would cost nearly \$5.5 million, or more than 27 times the public health investment.<sup>12</sup>

According to a 2008 study by researchers at the University of Arkansas for Medical Sciences, while local public health spending reached \$29.57 per capita for the median community in 2005, funding ranged from an average of \$8 per person in the lowest 20 percent of communities to nearly \$102 per person in the top 20 percent of communities.<sup>13</sup> The spending in the top 20 percent was 13 times more than the lowest 20 percent. They found that communities in the top quintile of public health spending were likely to operate as decentralized units of government.

In addition, the researchers found that communities with higher rates of medical spending and resources and more physicians per capita spent less on public health, and conversely communities with lower rates of medical spending and resources and numbers of physician spent more on public health. The authors provide possible reasons for this, including that: communities that spend a lot on medical care may not have additional resources for public health; that communities with low rates of health insurance may rely more strongly on public health services for their needs; and communities with good preventive services may offset the need for medical care.<sup>14</sup>

NACCHO found significant cuts to programs, workforce and budgets at local health departments around the country. Since 2008, LHDs have lost a total of 34,400 jobs due to layoffs and attrition.<sup>15</sup> Combined state and local public health job losses total 49,310 since 2008.<sup>16</sup> LHDs continue to struggle with budget cuts. In July, 2011, nearly half of LHDs reported reduced budgets, which is in addition to 44 percent that reported lower budgets in November 2010.<sup>17</sup> In addition, more than 50 percent of LHDs expect cuts to their budgets in the upcoming fiscal year.

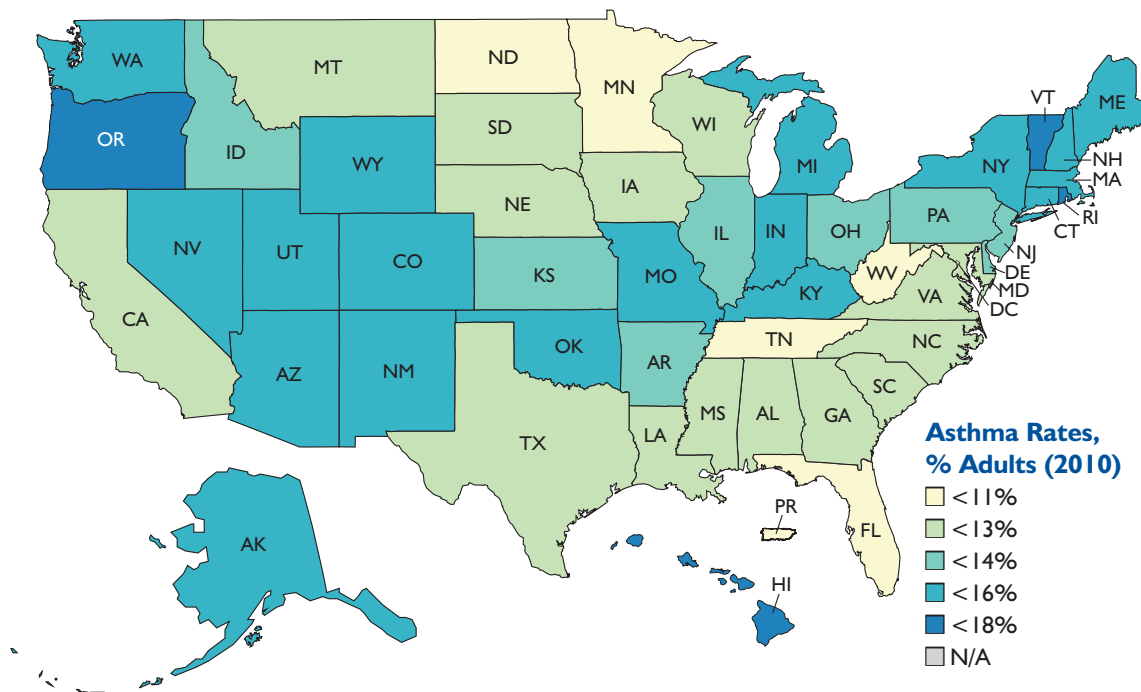
## Key Health Facts

ADULT HEALTH INDICATORS	U.S. Total	State with Highest/Worst	State with Lowest/Best
% Uninsured, All Ages (2010)	16.3%	Texas (24.6%)	Massachusetts (5.6%)
Adult Physical Inactivity Rate 2008-2010	N/A	Mississippi (32.6%)	Minnesota (17.6%)
AIDS Cum Cases 13 and Older 2009	1,099,163	New York (199,433)	North Dakota (184)
Alzheimer's Estimated Cases among 65+ (2025)	6,479,700	California (660,000)	Alaska (7,700)
Asthma 2010	13.5%	Hawaii (17.6%)	Tennessee (9.3%)
Percent Exclusive Breastfeeding at 6 Months, Births 2008	14.8%	West Virginia (5.6%)	California (25.7%)
Cancer Estimated New Cases — 2011	1,596,670	California (163,480)	Wyoming (2,680)
Chlamydia Rates per 100,000 Population (2010)	426.0	D.C. (932.0)	New Hampshire (185.9)
Diabetes 2008-2010	N/A	Alabama (12.2%)	AK and CO (5.9%)
Fruits and Vegetables 2005-2009	N/A	Oklahoma (15.5%)	D.C. (32.1%)
Human West Nile Virus Cases 2011	667	California (154)	N/A
Hypertension 2005-2009	N/A	Mississippi (34.8%)	Utah (20.3%)
Obesity 2008-2010	N/A	Mississippi (34.4%)	Colorado (19.8%)
Pneumococcal Vaccination Rates 65 and Over 2010	68.8%	Illinois (61.9%)	Oregon (74.0%)
Poverty 2006-2008	12.7%	Mississippi (20.5%)	New Hampshire (6.1%)
Seasonal Flu Vaccination Rates 65 and Over 2010	67.5%	Nevada (59.3%)	Colorado (73.4%)
Syphilis Rates per 100,000 Population (2010)	4.5	D.C. (22.3)	Wyoming (0.0)
Tobacco Use -Current Smokers 2010	17.3%	West Virginia (26.8%)	Utah (9.1%)
Tuberculosis Number of Cases — 2010	11,182	California (2,327)	Vermont (5)
CHILD HEALTH INDICATORS			
% Uninsured, under 18 (2010)	9.8%	Nevada (17.5%)	Hawaii (2.3%)
AIDS Cumulative Cases Under Age 13 — 2009 Yr End	9,448	New York (2,438)	ND and WY (2)
Asthma — 2009 High School Students	21.7%	Hawaii (28.3%)	South Dakota (15.5%)
Fruit and Vegetable Indicator — 2009	18.4%	North Dakota (13.7%)	Colorado (24.4%)
% of Kids 19 to 35 Months w/out All Immuniz's-2010	29.8%	Idaho (42.6%)	New Hampshire (19.0%)
Infant Mortality — Per 1,000 Live Births, 2008 Final Data	6.6	D.C. (10.9)	New Hampshire (4.0)
% Low Birthweight Babies — 2009 Final Data	8.2	Mississippi (12.2%)	South Dakota (5.8%)
Obese — 2009 High School Students	N/A	Mississippi (18.3%)	Utah (6.4%)
Obese: % of 10 to 17 Year Olds — 2007	N/A	Mississippi (21.9%)	Oregon (9.6%)
Pre-Term Births % of live births 2009 Final Data	12.2%	Mississippi (18.0%)	Vermont (9.3%)
Tobacco: Current Smokers High School Students 2009	N/A	Kentucky (26.1%)	Utah (8.5%)



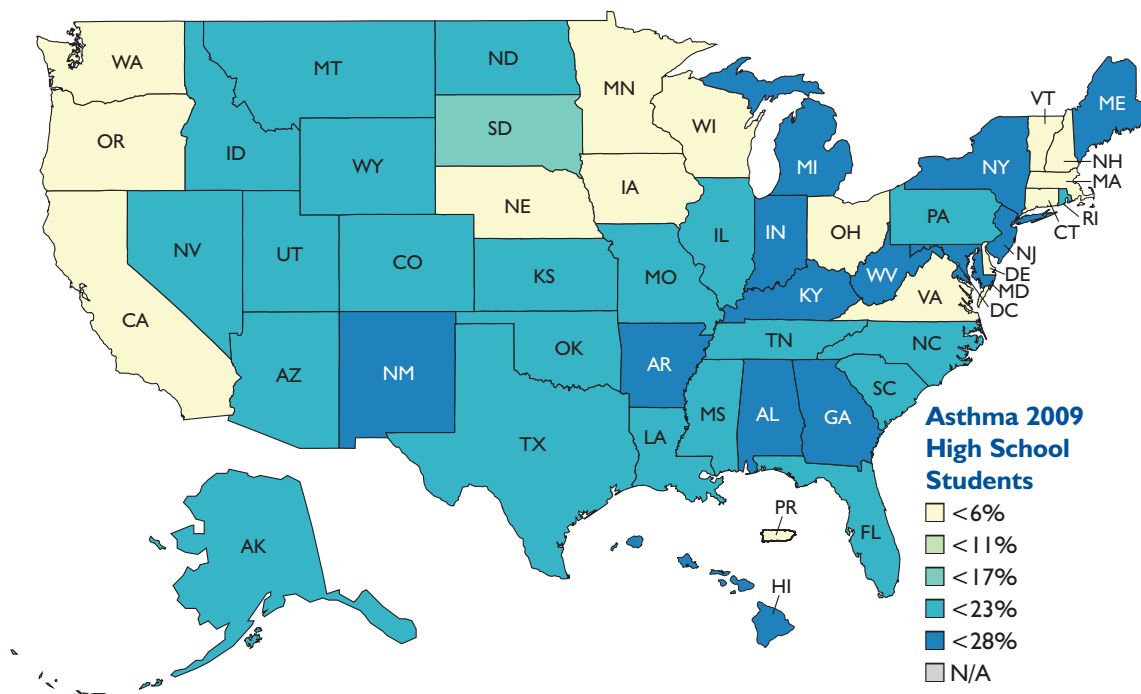
The following are a series of maps demonstrating differences in disease rates for a number of key indicators on a state-by-state basis.

## ADULT ASTHMA RATES



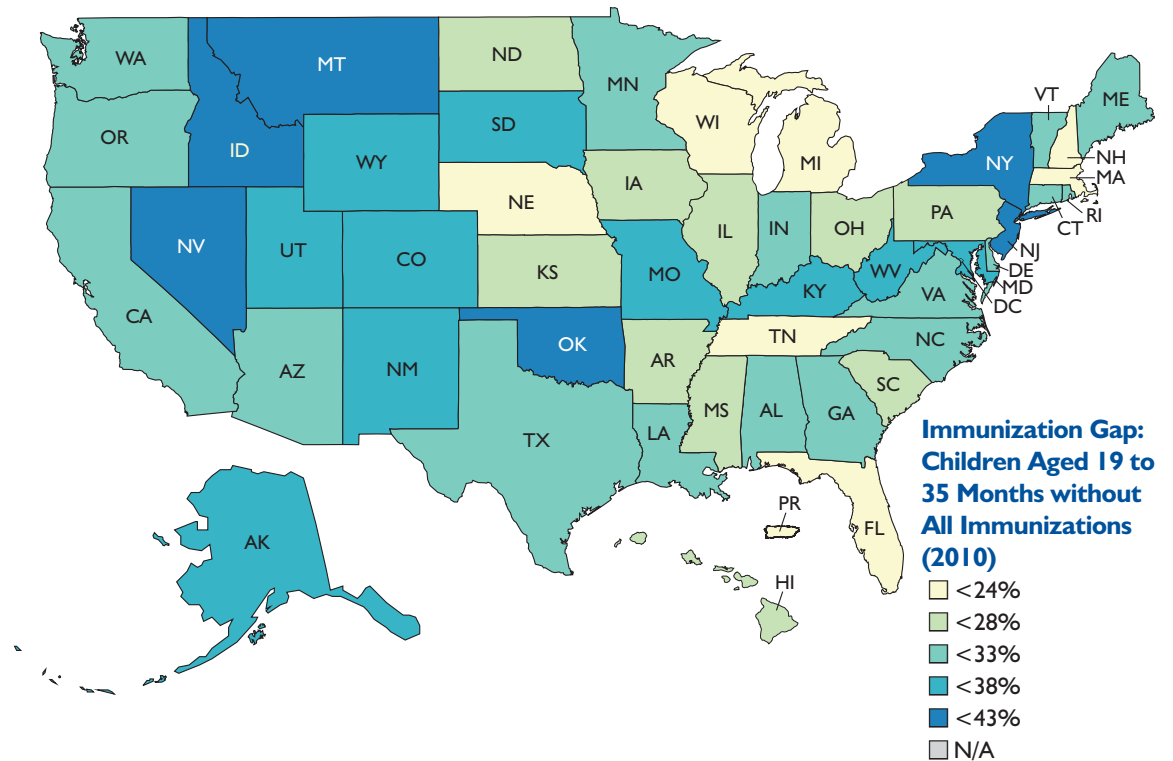
**Asthma 2010** data come from the BRFSS Prevalence Data 2010, percent responding “ever been told” they have asthma. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data

## ASTHMA RATES, HIGH SCHOOL STUDENTS



**Asthma 2009 High School Students** data come from the Youth Risk Behavior Surveillance System, Comprehensive Results 2009, percent responding “ever been told” they have asthma. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at: <http://www.cdc.gov/mmwr/pdf/ss/ss5905.pdf> (accessed October 19, 2010).

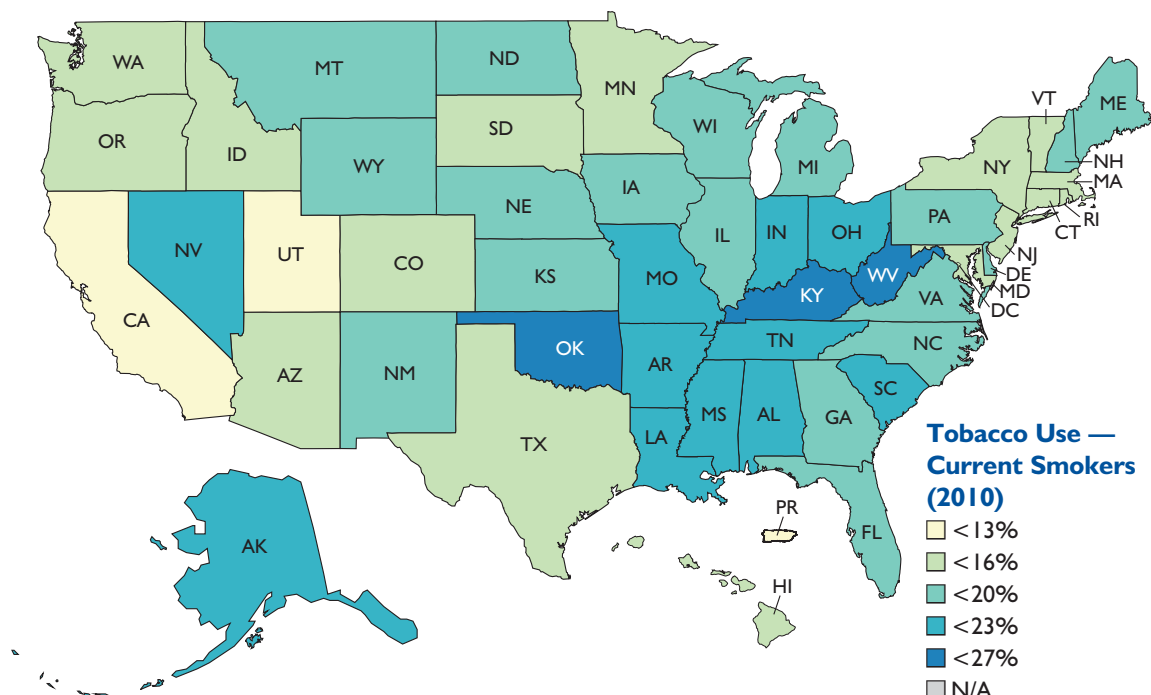
## IMMUNIZATION GAP AMONG CHILDREN AGES 19 TO 35 MONTHS



**Immunization Gap: Children Aged 19 to 35 Months without All Immunizations 2010** data come from Estimated Vaccination Coverage with Individual Vaccines and Selected Vaccination Series Among Children 19-35 Months of Age by State and Local Area U.S., National Immunization Survey, 2010 (accessed November 3, 2011). TFAH used the data for the 4:3:1:3:3:1 series which is the CDC-recommended series for children aged 19--35 months. The 4:3:1:3:3:1 series is used to evaluate progress toward one of the Healthy People 2020 objectives, which aims to achieve greater than 80% coverage with the series among children ages 19--35 months.

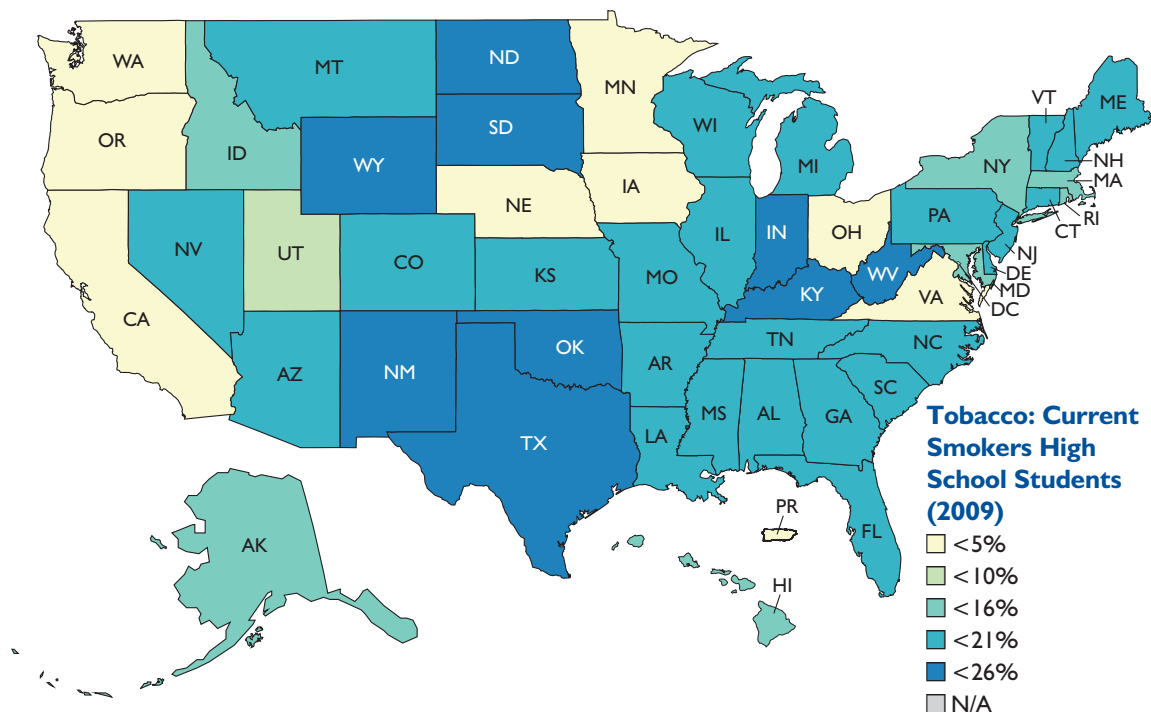


## PERCENT OF CURRENT ADULT SMOKERS



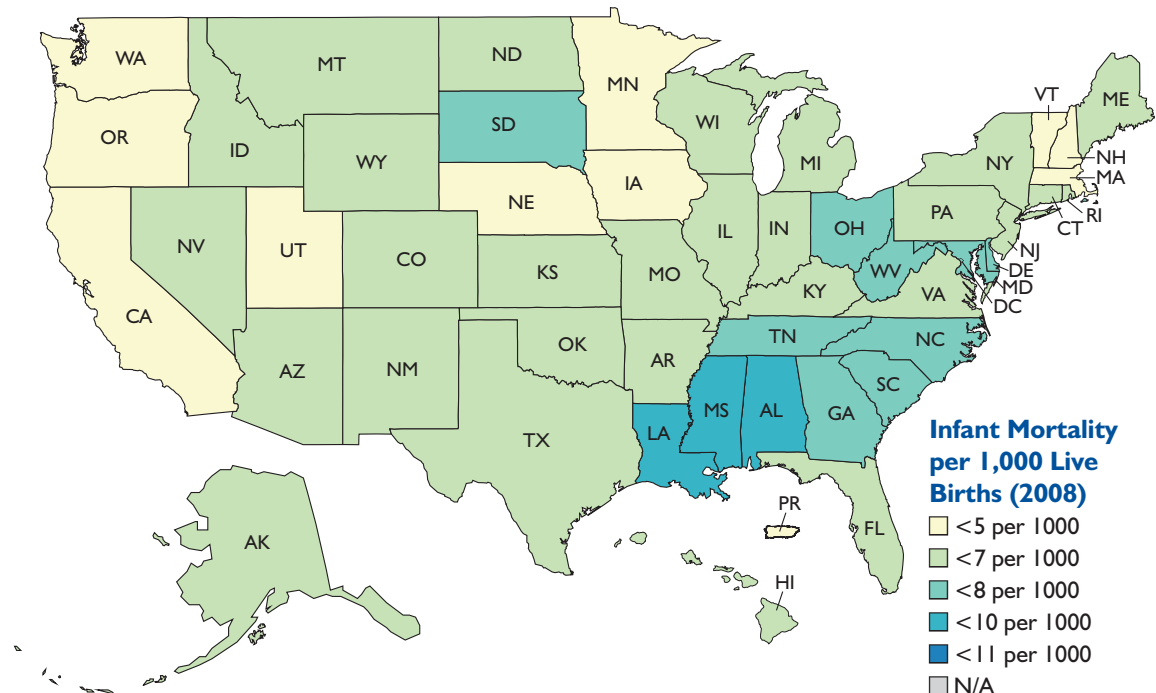
**Tobacco Use - Current Smokers 2010** data come from the BRFSS Prevalence Data 2010, percent responding they are current smokers. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data.

## PERCENT OF HIGH SCHOOL STUDENT SMOKERS



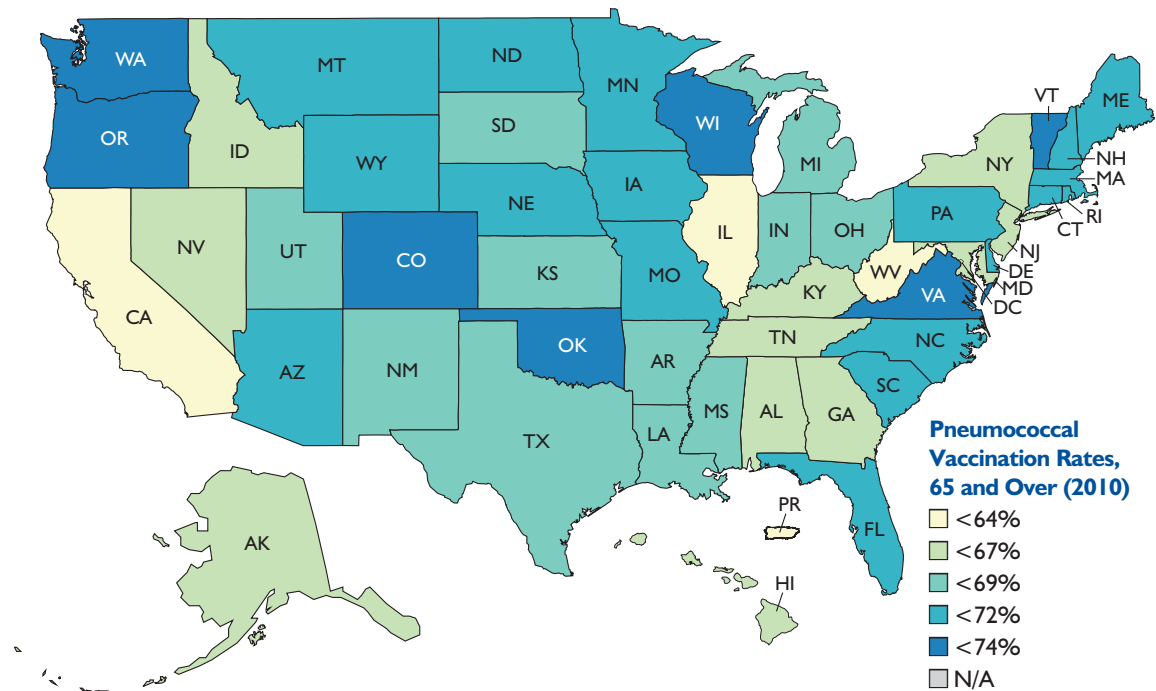
**Tobacco: Current Smokers High School Students 2009** data come from the Youth Risk Behavior Surveillance System, Comprehensive Results 2009, percent of “students who smoked cigarettes on one or more of the past 30 days.” National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at <http://www.cdc.gov/mmwr/pdf/ss/ss5905.pdf> (accessed October 19, 2010).

## INFANT MORTALITY PER 1,000 LIVE BIRTHS



**Infant Mortality per 1,000 Live Births 2008** data come from the National Center for Health Statistics, National Vital Statistics Report, Deaths: Final Data for 2008 (accessed January 3, 2012).

## PNEUMOCOCCAL VACCINATION RATES, 65 AND OVER



**Pneumococcal Vaccination Rates 65 and Over 2010** data come from the BRFSS Prevalence Data 2010. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data



# Examples of Prevention in Action

## 3 SECTION

### PREVENTION IN ACTION

## Travis County and Austin City Limit Tobacco Use

By Philip Huang, MD, MPH, Medical Director/Health Authority at City of Austin

In Travis County, tobacco is the number one preventable cause of death; it is estimated that 11 people die each week in Travis County from tobacco-related disease. Tobacco kills more than AIDS, crack, heroin, cocaine, alcohol, fires, car accidents, suicides and murder combined. To prevent the chronic and deadly conditions that come from tobacco use, Travis County and the City of Austin focused on policies and programs that would shift the population and environment away from tobacco use and ensure long-term sustainability and positive gains.

Since the city already had a strong clean indoor air ordinance, we looked to go beyond smoke-free and address tobacco-free campuses and outdoor areas. To obtain community involvement, we partnered with a large coalition that included members from the business community, healthcare providers, local foundations, schools and universities, local non profits, and city and county agencies.

From a clinical standpoint, we worked with the Integrated Care Collaboration, a coalition of local indigent care providers including the Federally Qualified Health Centers. These efforts modified electronic health records to ensure every patient was assessed for tobacco use and offered cessation services at every visit. We also challenged these groups to adopt 100 percent tobacco-free campus policies — not just smoking, but chewing tobacco and other forms as well. We found that there was very little perceived difference between tobacco-free and smoke-free, so it's far easier to start with the more encompassing tobacco-free initiatives. Collaborators on this project include Seton Family of Hospitals, Lone Star Circle of Care, Central Health (Travis County Healthcare District), CommU-nity Care, El Buen Samaritano and Peoples Community Clinic.

One of our own employees was dramatically impacted by the Seton Family of Hospitals smoke-free campus policy when she was caring for her husband at Seton after he was diagnosed with lung cancer. After over 40 years of smoking, she finally quit because of the inconvenience of having to walk across the street to smoke. She found that she saved thousands of dollars and was able to give up smoking after just two weeks of trying.

Austin/Travis County Integral Care (ATCIC), the local mental health and substance abuse authority, was one of the first in our community to adopt a tobacco-free campus policy. Data shows

that persons with serious mental illness are two to four times more likely to develop a nicotine addiction, consume nearly half of the cigarettes sold in the United States, and have a 25-year shorter life expectancy than the rest of the general population. ATCIC heard from their clients that they really didn't want to be smoking; they just smoked because everyone else was and they were bored. The policy changed the environment: cigarettes were once seen as rewards for positive behaviors, but now the entire center is tobacco-free, healthier and even more successful in dealing with all of their clients' addictions.

In addition, there is support for tobacco-free policies in worksites and universities. The Mayor's Fitness Council has a certification program that rewards employers that promote healthy behaviors, including physical activity, good nutrition and tobacco-free policies. After tobacco-free policies were implemented at participating companies, some of the most vocal employees who had initially been opposed to the tobacco-free policies sent thank you e-mails detailing how they quit smoking because of the policies and how it changed their lives. At Dell Computer, smoking rates went from 13 percent to three percent — very few interventions can have that kind of impact on behavior. Quite simply, going tobacco-free at workplaces promotes healthy behaviors and can prevent health consequences and save healthcare dollars down the line.

As we were working to limit outdoor tobacco use, we also began to look at our parks. Texas has been in extreme drought, and in September, 2011, we had the most catastrophic fire in Texas history just outside of Austin in Bastrop. Partnering with the Parks and Recreation Department, we were able to get the media to warn people about tobacco-use in parks and the potential for setting fires. Because of a burn ban in place, for the first time ever, the Austin City Limits Music Festival was officially smoke-free. Then, in December 2011, the Austin City Council passed a smoke-free park ordinance.

Through all our initiatives, we've found that if you give communities and leaders resources and information, they can make impactful changes and prevent illness down the road. Our work is by no means complete, we still need tobacco-free policies for multi-unit housing and restaurant and bar patios, but we know our community is an engaged and active participant in this movement.

## PREVENTION IN ACTION

# The Dudley Greenhouse: Fresh Produce in the City

By Lisa Conley, Director of Intergovernmental Relations & Public Health Advocacy, Boston Public Health Commission

We all know that consumption of fruits and vegetables protects us from obesity as well as an array of chronic diseases, including cancer, diabetes and cardiovascular disease. Yet, in spite of these known health benefits, many Boston residents do not eat the recommended minimum five daily servings of fruits and vegetables. Fewer than a third (28%) of Boston's adults and fewer than one-fifth (18%) of public high school students consumed fruits and vegetables at this minimum level. For too many of Boston's low-income residents, affordable fresh produce is simply not accessible.

Increasing access to urban gardening opportunities is an integral strategy to both bolster healthy eating among low-income residents and to increase physical activity through gardening. Research on school gardens demonstrates that participation in gardening and urban agriculture can encourage fruit and vegetable consumption among children, and has led to increased physical activity and improved nutrition among low-income populations of color. With this in mind, the Boston Public Health Commission partnered with the Dudley Street Neighborhood Initiative (DSNI) and The Food Project (TFP) to rehabilitate a 10,000 square foot greenhouse in the heart of Boston's Roxbury neighborhood.

Located at 11 Brook Avenue, the greenhouse replaced the former Brook Avenue Garage, a dilapidated structure that had lain dormant for many years. Not only were the physical remains of this abandoned mechanic's shop a neighborhood eyesore, but the site also posed serious environmental hazards, owing to the nature of the business that had been run there. In preparation for the greenhouse's construction in 2004, the Mass Highway Department conducted extensive environmental site assessment, investigation and remediation.<sup>18</sup> The remediation effort brought down lead and other industrial contamination to below acceptable levels.

After several attempts to develop business projects to benefit the community, DSNI, which remains the owner of the



greenhouse, leased the facility to The Food Project (TFP) in 2010. Building on its many years of nurturing green spaces in surrounding neighborhoods, and with the resources provided by Boston's Communities Putting Prevention to Work grant, TFP was able to undertake the final steps needed to get the space into working order.

The greenhouse measures approximately 10,000 square feet. Its growing space has been organized into four bays with one additional smaller bay that houses the controls, storage and edu-

cational and vegetable washing spaces. Two of the growing bays will be dedicated for use by the community ("community bays"), with the remaining two ("enterprise bays") allocated to growing produce to be sold at market rate to restaurants and other business. The goal is to generate enough revenue to enable this valuable community learning resource to be financially self-sufficient.

Spinach, tomatoes and salad greens are just some of the vegetables that are grown and harvested in the greenhouse. When the greenhouse is in full production, the bays are expected to generate a yield ranging from 30,000 to 40,000 pounds of fresh produce per year, depending on the varieties of vegetables planted. The community bays are used by community organizations to grow vegetables for their members. In addition, community bay produce may be donated to local hunger relief organizations, serve as material for classes on cooking healthy meals, or be sold at neighborhood farmers' markets/stands at substantially reduced prices. The prospects are many, and what is most exciting is that these decisions will be made with significant input from the community that the greenhouse will serve.

"Not too long ago, this site where we're standing was a garage; it was a blight on the neighborhood," Mayor Menino said during a visit to the Dudley Greenhouse in August. "Now it is an agricultural oasis, where residents can learn how to grow their own vegetables, and where fresh, affordable produce will be grown for the city's farmers' markets and food banks."

## PREVENTION IN ACTION

# Smoke-Free Environments: Helping Bostonians Breathe Easier at Home, Work and Play

*By Lisa Conley, Director of Intergovernmental Relations & Public Health Advocacy, Boston Public Health Commission*

**I**n 2004, Boston was one of the first cities in the nation to ban smoking in the workplace, a decision that Mayor Menino calls one of the toughest fights of his career. “I remember we announced that policy on Valentine’s Day at Doyle’s Pub in Jamaica Plain,” the Mayor recalls fondly, “I love Doyle’s, but I wasn’t sure I was going to get out of there alive that day. I did, but I didn’t go back for a few months.” What was a controversial policy in 2004 is now understood to be one of the most effective public health interventions in the last decade.

Now, Boston is again on the cutting edge of tobacco prevention, thanks to the leadership of the Mayor and an infusion of federal funding from the Centers for Disease Control and Prevention’s (CDC) Communities Putting Prevention to Work Program. The Boston Public Health Commission (BPHC) received \$6.1 million to reduce Boston residents use and exposure to tobacco. Over the past two years, this funding has been used to support a robust campaign to implement smoke-free policies throughout the city, including in public and private housing, on hospital campuses and on all public school properties.

In 2010, BPHC, in partnership with private developers and city development agencies, set out to create 1,000 new smoke-free housing units by providing technical assistance, free advertising and other incentives to building owners. The city has now far-exceeded its goal, with over 4,000 units logged in the last two years. In addition, the Boston Housing Authority will convert its 12,000 units to be smoke-free, improv-

ing indoor air quality for the housing authority’s 27,000 residents and 900 employees.

Beyond indoor air policies, the city has implemented policies to improve outdoor air quality in targeted environments. This past summer, the Parks Department posted No Smoking signs at all 135 city-owned playgrounds, urging parents and park users to think twice before lighting up around young children.

And this fall, the Mayor stood with the city’s teaching hospitals to announce a plan to make city hospital campuses smoke free. When fully implemented in April 2012, these policies will eliminate secondhand smoke exposure during over 5 million patient visits and for over 50,000 employees. “Hospitals are places where sick people go for healing,” said Dr. Paula A. Johnson, a cardiologist who is executive director of the Connors Center for Women’s Health and Gender Biology at Brigham and Women’s Hospital, and chair of the Boston Public Health Commission’s Board of Health. “It is critically important that hospitals create environments — not only inside the walls of the institutions, but also on their doorsteps — that promote good health.”

The city followed up the hospital announcement with a vote of the Boston School Committee, in January 2012, which passed a comprehensive tobacco and nicotine free policy in all public schools. The policy includes a tobacco free buffer zone of 50 feet around school property and additional enforcement and signage. This policy protects 56,000 students and 9,000 staff at 135 schools.



## PREVENTION IN ACTION

# Dane County: Linking Our Local Food System with the Health of our Community

*By Carrie Edgar, Department Head and Community Food Systems Educator, Dane County UW Extension*

**D**ane County UW-Extension has a long history of working with the farmers who raise our food and the consumers who purchase it. However, through Community Food Systems work, we have broadened that goal to ensure our local food system encompasses all members of the community (rural and urban) and has public health and prevention as a priority. This shift has coincided with the local food movement.

In Dane County, which includes Madison, Wisconsin, we are lucky to have a diverse agriculture system. Along with conventional row crop farming, we have many fruit and vegetable farms, Community Supported Agriculture farms, and livestock and dairy farms. We also have multiple farmers markets and in fact, our Dane County Farmer's Market is the largest producer-only market in the country.

Still, when we took a step back and looked at the entire community, we realized not everyone had access to fresh, locally grown food. Solving this type of disparity became a priority and many members of the community, including local government, took up the issue. Some of the most notable improvements have been the development of school and community gardens, implementation of farm to school programs and the expansion of farmers markets.

In an effort to provide place-based education, Dane County UW-Extension nutrition educators set-up displays at farmers markets to talk to people about what produce is in-season and inexpensive and to provide cooking demonstrations. Often, we find that people are interested in using fresh ingredients but thought they were too expensive or didn't know how to prepare them. The nutrition educators are often stationed at markets near public health clinics and help people understand that they can use their Women, Infant and Children (WIC) coupons and EBT card for food benefits at the farmers market.

Extension also works closely with schools and other organizations to help create and maintain school gardens. We use school gardens as classrooms to teach students about gardening,

nutrition and other important life skills. Our goal is to have a garden at every school in the county. Extension staff were founding members of the GROW Coalition that supports school and parent organizations that are interested in outdoor education with a strong emphasis on nutrition and getting kids outside and active.

Since 2005 the Dane County Food Council, a committee of citizens and County Board Supervisors, has led the mission to explore issues and develop recommendations to create an economically, socially and environmentally sustainable local food system for Dane County. They have advocated for policies and supported the development of programs within the county such as the Institutional Food Marketing (IFM) Coalition. The Coalition started in 2006 to link farmers with schools, hospitals and other institutions to help them source local food. We found many organizations want to purchase locally grown food, however they didn't have the channels to do so efficiently. IFM connects farmers with the institutions, improving the farmer's business and the health of the community members these organizations employ, teach and serve. To our knowledge, this is the only County operated coalition of its kind that exists in the United States and it has had tremendous success. IFM generated more than \$1.5 million in local wholesale food sales in 2010 helping to create or retain 29 jobs in the area.

We are also working to address barriers in the community food system that have been identified including lack of infrastructure and farmer access to land. One of these new projects is the development of a food hub (produce packing house) where locally grown produce can be aggregated, packed and sold to local distributors and institutions. We are also working with the Dane County Parks Department on ways to make county owned land available to beginning farmers to raise food.

In Dane County, we are working to help every member of the community stay healthy and be active, so our community can thrive. By engaging with people at various levels, we ensure healthy foods and information is available to all who want to live healthier and more active lives.



## PREVENTION IN ACTION

# Shifting the Wellness Culture: Making the Healthy Choice the Easy Choice

By Kay Owen, *HEALTHY Armstrong Project Director*

**I**n 2005, Pennsylvania began to require that schools measure Body Mass Index (BMI) of students and send letters to parents of overweight or obese children. At the same time, a local pediatrician noticed that a significant portion of his pediatric patients had conditions that used to be adult problems (high blood pressure and cholesterol levels, sleep apnea and obesity).

He began to talk with the local hospital about this and they brought in other members of the community, including the local school district. Later, the county government and a commercial insurer got involved. As time went on, others were added to the group such as the YMCA, 4-H, local recreational groups, businesses and parents.

In the past, when we looked at the older BMI data, we realized a large portion of children entering kindergarten were within the normal weight range, but, as they went through elementary school, their BMIs went up before plateauing in high school. More recently, we noticed that kids entering kindergarten were now overweight and obese, so we shifted to focus on birth to school age and added more of a family/community focus.

### **Making the Healthy Choice the Easier Choice**

In schools, we removed all vending machines that contained junk food and sugary beverages from student areas and replaced them with healthy machines. In addition, we no longer have deep fryers in our schools and sell nothing fried. While we do serve a form of fries, they are baked and are served less frequently. Instead, we provide fruits and vegetables at every single meal and we also use only whole grain products and serve 1% and skim milk.

In the first few years, the school district increased the amount of fresh fruit and vegetables purchased by more than \$50,000 per year. In 2003, the school district purchased \$61,930 worth of fresh fruits and vegetables. In 2006, that figure more than doubled to \$136,197.

In addition to changing the food that's available, we had to shift the culture. At each school

building, there is a wellness facilitator who plans and implements in-school and after school activities that are either physical or include lessons about nutrition. Also, every secondary school has a morning walking program — so when kids arrive, instead of standing around, they have walking clubs and each elementary school has morning exercises that are announced over the loudspeaker.

We've received positive feedback from many members of the community. One mother wrote to us detailing her experience with her daughter. She said, my child was considered fat, but once we acknowledged the issue, we took steps to address the problem. The whole family participated in helping her lose weight and we all look better and feel better. At first it was hard to break bad habits, but we drew upon community services and are much happier.

The work we've done with schools and families has spread throughout the community. In the summer, the hike and bike event draws tons of interest. In addition, our Healthy Lifestyle Extravaganza, which is held at the local vocational education school, includes exercise stations. At the event, kids rotate from station to station and obtain tickets and the tickets are turned in for door prizes. There is also a healthy cooking demonstration by the culinary students: where students learn how to make healthy snacks and then get to eat them!

We have dramatically shifted the culture in our schools and community. In October of 2006, kids in the Armstrong School District participated in 402,142 minutes of physical activity. Two years later, students participated in 796,260 minutes of physical activity.

By focusing on the entire community, we can help children and families strive to be healthier. Our story shows that if you provide the resources and tools, families know what to do with them. We all want to be healthy and happy, sometimes we just need a little help.

## PREVENTION IN ACTION

# De-Normalizing Smoking and Preventing Tobacco Related Illnesses

*By Linda Aragon, Program Director, Tobacco Control and Prevention Program at Los Angeles County Department of Public Health*

Since its inception in 1989, the Los Angeles County Tobacco Control and Prevention Program (TCPP) has gained valuable experience in the field of tobacco control and continues to evolve in order to tackle the complexities and challenges of implementing a successful tobacco control program. Following the lead of the state tobacco control program, TCPP transitioned from a health education approach focusing on individual-level behavior change to a policy-based approach targeting community-level social norms.

As TCPP changed processes, we had to develop different and new capacities. To do so, TCPP collaborated with The Center for Tobacco Policy & Organizing (The Center) to develop a step-by-step approach that could be used by community partners to plan and implement their work. The Policy Adoption and Implementation model is separated into five distinct phases that build upon each other:

- 1. Community assessment:** identify the problems and develop an understanding of what is needed to address the issue;
- 2. Policy strategy development:** use information from phase I to build an action plan;
- 3. Coalition building/broadening:** increase public awareness about efforts to address tobacco problem in a community;
- 4. Implementation of policy strategies:** work with communities to educate and inform local officials about the impact of tobacco use and exposure to secondhand smoke; and

### **5. Policy implementation and enforcement:**

work with city officials to ensure adequate resources are created to support the implementation and enforcement of local policies.

In addition to developing this organizing tool, TCPP implemented infrastructural changes that enabled the program to strengthen community partnerships, provide quality technical assistance, and build internal and external capacity to work with community-based organizations to spearhead local tobacco control activities.

Short-term and intermediate outcomes, including the number of tobacco control policies adopted in Los Angeles County cities and the unincorporated areas and the prevalence of cigarette smoking and exposure to secondhand smoke exposure have been collected, and long-term outcomes are currently being evaluated.

However, we have found that tobacco control policies, which are part of a comprehensive tobacco control program, change social norms around smoking, reduce smoking prevalence and increase quit attempts.

To date, more than 50 cities and the Los Angeles County Board of Supervisors, which governs the unincorporated areas of the county, have enacted one or more tobacco control policies. The adoption and implementation of these policies create a level playing field for affected businesses and provide increased protection from the harmful effect of secondhand smoke exposure.

## PREVENTION IN ACTION

# Live Well, San Diego!: Building One of the Nation's Most Thriving Counties

*By Nick Macchione, FACHE, Director and Deputy Chief Administrative Officer, Health and Human Services Agency, County of San Diego, California*

Ask any given person what immediately comes to mind when they think of San Diego, and you'll likely get a response about its role as a vacation destination, with its plentiful beaches, mountains and desert landscapes; its incredible weather; its friendly residents; its robust military presence; or its role as a key corridor for commerce. Sunny San Diego County bustles year-round with activity, ranging from Navy SEAL trainings to weekly charitable walk-athons. With all that San Diego has to offer, a logical conclusion would be that San Diego County residents are healthy and thriving.

Unfortunately, the reality is that one out of every two San Diego adults is overweight or obese. To make matters worse, nearly one-third of all fifth, seventh and ninth graders are overweight or obese. In other words, San Diego is as physically unfit as any other geographical region of our nation. The County of San Diego, Health and Human Services Agency (HHSA) recently identified a looming health "tsunami" that, absent any action, is poised to hit our shores. We refer to this major threat as "3-4-50," noting that three behaviors (poor diet, lack of physical activity, and smoking) contribute to four chronic diseases (heart disease/stroke, cancer, Type II diabetes, and lung disease) that cause over 50 percent of all deaths in the region.<sup>19</sup> The statistics are sobering: over 4 billion dollars are spent each year in San Diego County to treat these four chronic diseases alone.<sup>20</sup>

However, the County of San Diego is not willing to allow the area that boasts America's Finest City to continue down this destructive path. In 2010, the County set out to make a major course correction and rolled out a regional effort to steer San Diego away from a state of chronic disease and spiraling health care costs, and towards a future in which all San Diegans are healthy, safe and thriving. The ten-year roadmap to help us get there is known as, "Live Well, San Diego!" It's a three-part plan that harmonizes health, safety and economic vitality

for the entire region. The first part of the plan was adopted by the County Board of Supervisors in July 2010 and focuses on Building Better Health.<sup>21</sup> The Building Better Health component of Live Well, San Diego! has four key goals: 1) Building a Better Service Delivery System for the over 600,000 San Diegans we serve each year; 2) Supporting Positive Healthy Choices by all San Diegans; 3) Pursuing Policy and Environmental Changes by supporting sustainable policy and environmental improvements; and 4) Changing Culture From Within County Government by promoting employee wellness.<sup>22</sup> The second and third parts of the plan are referred to as "Living Safely" and "Thriving," and both are currently being developed to synergize with our Building Better Health strategy.

It's a decidedly ambitious plan that requires active involvement from the entire region. We are engaging San Diegans of all ages—from school-aged children to seniors—and from all walks of life—from teachers to farmers to military officers to philanthropists to community leaders. We're also reaching out to entities in all sectors—ranging from governments to businesses to faith-based organizations to health and social service providers to life science and biotech innovators. The goal is to create community convergence by establishing "Accountable Care Communities," in which all members of our communities are working together to establish community-wide health goals and measure their performance against those shared goals.

One surprising—and tremendously encouraging—development has been that the business community has turned out to be one of the most enthusiastic supporters of Live Well, San Diego! We have found that a major draw of Live Well, San Diego! is that it offers the business community an opportunity to achieve what we at the County call "a healthy bottom line." The idea is that supporting healthier lifestyles will lead to healthier families and employees, and lower health care expenditures by keeping chronic conditions at bay.



### Live Well, San Diego!

There are many ways in which the business community has been participating in Live Well, San Diego! For example, the County of San Diego teamed up with the San Diego Business Journal to support the promotion of employee wellness through their San Diego's Healthiest Companies Award competition. In so doing, we have begun to highlight wellness efforts across the community, issue calls to action and provide positive examples for other companies to follow. In addition, the County has worked with the business community to create and support breastfeeding programs. When you think of programs that can have short- and long-term benefits that are low-tech and low-cost, breastfeeding certainly springs to mind. We know that breastfeeding in the workplace helps avoid absenteeism on behalf of parents and will help make for a healthier child—who will hopefully grow up to become a healthier worker in the future. Another example is our efforts to support ICANATWORK.org, a free website where any San Diego organization can join and create campaigns to promote employee wellness. One major take-away from all of these efforts has been that you can't incentivize businesses to promote employee wellness by burdening them with more regulations; instead you have to demonstrate how embracing employee wellness improves the bottom line for both business and its surrounding community.

Of course, we have to go beyond the business community to achieve population-level health improvements. To do so, we have created a "SEA of Change": Support, Encouragement and Accountability between members of the San Diego community as we pursue the goals of Live Well, San Diego!<sup>23</sup> Through federal grants (including Communities Putting Prevention to Work and the Community Transformation Grants) and new collaborations, we are eliminating silos and working side-by-side with other entities in the region to promote wellness. We are working with the Navy Southwest Region and Medical Center, for example, to increase collaboration and address health challenges that face military families, such as tobacco use, obesity, and mental health awareness. In addition,

HHS has piloted a Care Transitions Intervention program with Sharp Memorial Hospital to empower chronically ill patients to take active roles in their own wellness after discharge. In the first 10 months, 138 patients have taken part in the program, and participation has resulted in a reduction of the 30-day readmission rate to 2.3 percent, as compared to the 12.6 percent readmission rate for non-participants.

It should be noted that our efforts to improve the health of the region didn't start with Live Well, San Diego! Rather, Live Well, San Diego! has truly been built upon the groundwork laid by the local health and social service provider community over the past few decades. As a result of these long-standing efforts, we have begun to see encouraging trends emerge. We are one of the few regions in the nation to reduce heart disease and stroke from the first leading cause of death from chronic disease to the second leading cause. Furthermore, the University of California at Los Angeles recently completed an independent evaluation of childhood obesity, finding that San Diego County reduced obese/overweight children by 3.7 percent—the largest reduction in Southern California.<sup>24</sup>

Despite these encouraging trends, there is still much work to be done. This journey ahead will require continuous innovation, commitment to excellence, and engagement of not only those within government, but our entire citizenship. Due to the scale of what we are undertaking, it will take many more years—and perhaps even generations—to see the true impact of Live Well, San Diego!

I hope I've illustrated that Live Well, San Diego! isn't about a singular, one-size-fits-all solution, or government alone—it's more about the important role of local government as a convener of all sectors to create community convergence around health and wellness. And San Diego County is not alone in this quest for wellness—other jurisdictions throughout our great nation are making great strides on the wellness front. My hope is that we can patch our collective efforts to achieve sustainable results to win back our nation's health—that we can achieve "Live Well, America!"



## PREVENTION IN ACTION

# New York City Goes from “Want a Cigarette?” to “Yes, I mind if you smoke”

By Elizabeth Kilgore, Director, Media and Education, Bureau of Tobacco Control, NYC Department of Health & Mental Hygiene

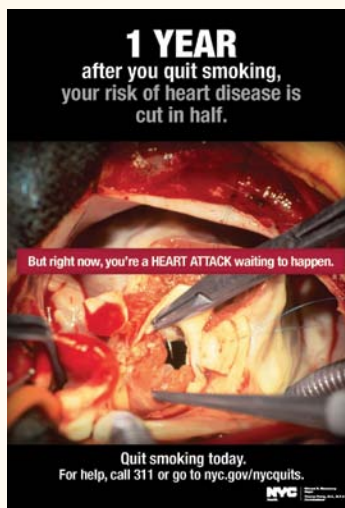
In 2002, New York City elected Mayor Michael Bloomberg. He, along with the Health Commissioner at the time, Dr. Thomas Frieden, made tobacco cessation and the prevention of tobacco-related illnesses and chronic conditions their number one priority for the health department.

To truly prevent tobacco-related illnesses and conditions, we knew we had to help large numbers of people and implement scientifically-proven, population-based interventions. We developed a five-point plan:

- 1. Price increases:** studies have shown taxes to be the most effective way of reducing smoking prevalence;
- 2. Legislation and policies that promote smoke free air:** New York City was one of the first in the country to pass a comprehensive smoke-free law that included all workplaces including bars and restaurants;
- 3. Cessation:** make cessation medications and services as available as possible to every New Yorker who wants them;
- 4. Mass public education campaigns:** we learned a lot from what California, Massachusetts and Australia had done with media, most notably graphic depictions of the health consequences of smoking in the hopes of encouraging people to prevent developing these conditions; and
- 5. Research and evaluation:** Both Dr. Frieden and our current commissioner, Dr. Thomas Farley, want to understand the impact of our work and ensure the interventions we implemented curb tobacco prevalence and prevent tobacco-related illnesses.

Perhaps, the most unique aspect of our plan was the public education campaign. We found that developing and disseminating educational campaigns that depict the harsh realities of the consequences of smoking (both on the smoker and those who live with and care for the smoker) helps people take the initial step toward quitting.

In my personal life, friends and new acquaintances routinely ask about the campaign featuring Marie. Marie has Buerger's



Disease, which affects those with a history of heavy smoking or chewing tobacco. As a result, Marie has had most of her fingers, a leg and a foot amputated.

Through these ads, Marie has become a local celebrity — people recognize her and often tell her they quit smoking because of her. Marie shows that it's never too late to quit. When we showed her ads, 30,000 New Yorkers called our quit line in 16 days.

In New York City, we have seen a great decline in tobacco prevalence. In 2002, prevalence was at 21.5 percent, and it is now 14 percent. And, youth smoking is lower than ever, at about 7 percent.

As we've seen these successes, other cities and communities have asked for our help and best practices. We sometimes find that communities are reluctant to tell the hard truth of smoking related illness and would prefer more aspirational, feel good messages.

I suggest jurisdictions really investigate the data on the effectiveness in New York City and Australia on the ads — they work.

Many of New York City's ads have been shown all over the world; when ads are effective from New York City to the Ukraine to India, there's something there. People don't want to get sick, suffer, die and devastate their families; and communities want to prevent illnesses.

While you might get calls from the community complaining when airing these campaigns, the reality is that smoking causes ugly terrible things; these ads tell the truth. We've seen it in New York City with stark ads: people will quit smoking and you will save lives.

That said, there are no quick fixes and cessation isn't the result of one intervention. While one intervention can make a huge difference, it's all the pieces of our tobacco control 5-point-plan in combination.

With all the pieces, we have seen a dynamic culture shift in New York City. Our community went from people asking one another, “want a cigarette?” to “mind if I smoke?” with most people saying, “yes, I do indeed mind.”

## PREVENTION IN ACTION

# Pitt County: Celebrating our Community and our Community's Wellness

*By James Rhodes, Planning Director, Pitt County, North Carolina*

People talk about prevention initiatives such as shared use policies and farmers markets as if they are new and maybe they are for them. However, that's not the case for Pitt County, as we have been, apparently, on the forefront of these initiatives for some time.

In 1978, the county created a shared use policy to open school sites for recreational and community activities. It quickly became how we were brought up.

I coach basketball and can easily secure a gym for practice. As a county citizen, I can reserve any facility as long as it isn't being used at that time for a school function. This goes way beyond gyms to include any fields, trails and most other grounds. In fact, most of our schools have trail systems that connect through the neighborhoods, which can be used for hiking, biking and running.

Quite simply, our community tries to get everything they can out of the land and it really does help people get physically active.

With the shared use policies, it's also been far easier to make additional investments in school facilities. Private individuals have paired with public funding to supplement what schools have — anything from infield dirt for a baseball diamond to additional resources for trails. The land serves all capacities — the school invests in it and the community invests in it.

More recently, we've extended the nature of shared use to parks. We even developed a centrally located district park that serves as a hub for the community — it is near schools, our greenhouse facilities, the animal shelter, our farmer's market, the recycling center and the senior's center.

We have been able to create connectivity between all activities — so instead of just dropping off recycling, residents also visit the market or take a hike around the connecting trails.

In fact, the farmer's market is right by one of the trails that is over a mile long and runs around the park. It is also adjacent to the community garden. When we planned to open the garden,



which is one and one quarter acres, we had a waiting list for folks that wanted their own plot of land. There was huge excitement and that has continued to this day. A resident who moved here from North Dakota was one of the first people in line for the community garden. She never expected the level of community camaraderie among the gardeners. She gets good exercise and grows healthy foods to serve her family. The gardeners come down to walk on the trail, meet a relative or neighbor — it has created a nice family and intergenerational atmosphere.

In addition, our senior center residents use the garden to help educate elementary school kids about gardening and kindergarten classes have lessons there. In fact, they had their own jambalaya cooking project at the height of the growing season. The kids really enjoyed themselves, but also were introduced to healthy vegetables and foods that are grown in their community.

We know we aren't perfect — we constantly need to work to help people stay healthy and happy, and, to that end, we've expanding our reach to corner stores in food deserts to market fruits and vegetables prominently.

For us, it all started with the shared use policy in 1978. Since then, the community has bought into a healthy lifestyle and we've been able to do more and more to help more and more people stay fit, active and productive.



## PREVENTION IN ACTION

# San Antonio: A Community Making Healthy Choices

By Maggie Thompson, Health Program Manager, San Antonio Metropolitan Health District

San Antonio is a great community. We have a mayor who cares deeply about health and a community that, when given the opportunity, will strive to be healthier.

In the last two years, the San Antonio Metropolitan Health District (Metro Health) through the Communities Putting Prevention to Work grant has created around 30 initiatives that help make the healthy choice the easier choice.

We increased access to healthy foods and opportunities for physical activity, and we've worked on changing the built environment so that parks and community and residential areas are supportive of a healthy lifestyle. We recently passed a Complete Streets ordinance that requires new city-sponsored streets to provide support for bikes and pedestrians.

We have also partnered with city departments, such as the Library, the Planning Department, Public Works, the Office of Environmental Policy, and the Parks Department to improve health.

Through the Parks Department, "Fitness in the Park" provides free classes to city residents, including Yoga, Zumba, boot camps and other exercise classes. In addition, we placed outdoor fitness stations in 25 parks. When the National Recreation and Parks Association came to view our program, San Antonians went up and thanked them, thinking they had provided the resources – our community was that appreciative of the fitness stations. Since we installed the outdoor fitness stations, park use has gone up.

With the local Independent School Districts, we've put 108 salad bars in schools, which reach 100,000 students. We've provided physical activity equipment to 365 schools to ensure 350,000 students are moving, active, and understand the importance of healthy behaviors. We have also placed health assessment stations, outdoor fitness equipment and walking trails on the grounds of local libraries. Families can enjoy both reading and physical activity.

In addition, San Antonio became the first city in Texas to have a Bike Share program thanks to collaboration between Metro Health and the Office of Environmental Policy. Now, Austin and Houston are modeling similar initiatives after ours. We established a Ride-to-Own bicycle program which has flourished in underserved communities and provided over 1200 bicycles to residents.

By working with the Mayor's office and other city departments, we've made health a community movement. Mayor Julián Castro established a Mayor's Fitness Council and has heavily promoted these initiatives. This gives our programs more community support and awareness.

The community spirit is evident during *Síclovia*, a free event that temporarily makes selected San Antonio streets available to residents for recreational and sports activities so participants can bike, run, skateboard, etc. without worrying about cars. Because our first *Síclovia* was so popular, we were approached by Fiesta San Antonio to incorporate a health focus. Fiesta is the city's week-long celebration each year with festivals, parades and numerous activities.

We are launching a "Fit Fiesta" to allow people access to healthy activities and foods. While this is a small step, it is an encouraging move toward making one of our biggest community gatherings healthier. *Síclovia* will be a pre-Fiesta event to kick off a Fit Fiesta.

We've found that if we provide the community with ways to be healthy and exercise, they will enthusiastically use these resources. While we've had great accomplishments, we need to keep up the momentum.

This is a start, it is incredibly important to change the attitude of residents to give them opportunities. If they have few options, they are more likely to stay inside – it's as simple as that.

By focusing on preventive initiatives, we provide wonderful opportunities to improve the health of the community.



## PREVENTION IN ACTION

# Ensuring Healthy Habit Development in Child Care

*By Ashley Obiaka, MPH, Board of Director, Jefferson County Department of Health*

**T**he state of Alabama ranks second in obesity compared to the other 50 states in the nation, with an adult obesity prevalence rate of 32.3 percent. Obesity is a significant health issue because it contributes to high health care costs and chronic disease development. Prevention should begin during early childhood since obese and overweight children are likely to continue this unhealthy weight gain trend into adulthood. Therefore, improving children's opportunities to develop healthy behaviors during early childhood becomes an important strategy towards mitigating obesity. In Jefferson County, Alabama, child advocacy organizations and businesses and government agencies who understood the importance of facilitating healthy habit development in children, took action.

### Regulations

In 2011, the Jefferson County Department of Health developed and adopted child care health and safety regulations to ensure general wellness for children in Jefferson County. Alabama Department of Human Resources (DHR) provides minimum standards for child care centers; however, they are applicable only to licensed centers. In 2007, the Mobile County Department of Health adopted safety standards for children; however, they do not include nutrition and physical activity requirements. JCDH capitalized on the strengths of both DHR's minimum standards and Mobile's safety regulations by developing and adopting regulations that include child health requirements and apply to all child care centers regardless of license status.

For example, Jefferson County's new regulations require that children be provided with opportunities to engage in physical activity with developmentally appropriate equipment; daily physical activity must be included on child care schedules and prominently posted; and screen time must be limited. Meals and snacks served to children must comply with USDA guidelines; water should be made available during meal times; and at least half the grains served each week must be whole grains. Child care centers are also required to receive child care training that was developed to provide child care centers with

ongoing support and education, while assisting with compliance. Other requirements involve employee background checks, safe and hygienic facilities and practices, clean and safe physical structures, clean and well-maintained objects, as well as food service rule adherence. United Way of Central Alabama, Alabama Breast Feeding Coalition, Healthy Child Care, Child Care Resources, Success By 6 and Alabama Department of Human Resources contributed to the process and Mobile's regulations were used as a guide.



### Assessment, Training and Incentives

Success By 6 used the Nutrition and Physical Activity Self Assessment for Child Care (NAP SACC) to assess child care centers and develop nutrition and physical activity improvement plans. Childcare Resources provided child care center staff with tailored physical activity and nutrition training, which provided them with information required to make healthy food and physical activity time available to children. Furthermore, child care centers that exhibited leadership and high need were competitively awarded playground equipment. Playgrounds were built and installed with community and local business volunteers.

### Conclusion

Jefferson County took a comprehensive approach to ensure healthy habit development in children frequenting over 360 child care centers. As a result, the course of a child's day will be positively impacted by required health practices, safe playground facilities, child care training and improvement plans.



## PREVENTION IN ACTION

# Tobacco Advisory Signs, Promising Practice Implementation

**T**he Jefferson County Department of Health (JCDH) launched an initiative to post tobacco advisory signs at point of purchase through incentivizing voluntary signage placement. With the goal of increasing awareness, reducing smoking rates and youth initiation, six 11"x17" signs were developed depicting risks associated with tobacco use such as cancer, impotence and respiratory problems in children. In addition, each sign promotes Alabama's Quitline number as a resource for smokers to use and to increase cessation attempts. Placing signage where tobacco products are purchased is the ideal place to influence the minds of tobacco users.

The tobacco industry has strongly advertised in the retail environment; convenience stores and small grocery stores are among venues heavily targeted. Leading the initiative, the Tobacco Retail Warnings Specialist focused on convenience stores. As the primary outlet in underserved neighborhoods, they are an ideal location to convey healthful information in an environment where its reach may otherwise be limited.

The design of the six tobacco advisory signs was influenced by focus groups' feedback, the FDA proposed images for cigarette packets, and evidence based research. A Behavioral Risk Factor Surveillance System (BRFSS) report released in December 2011 revealed that 78 percent of people surveyed in Jefferson County were in favor of having tobacco advisory signage posted in their neighborhood convenience store, pharmacy, or grocery store. Furthermore, studies have shown that smokers in countries with posted tobacco advisory signage were much more likely to understand the adverse health effects associated with smoking and reported they actually believe the health hazards portrayed by the signage to be true.

The Tobacco Retail Warnings Specialist initially canvassed 61 convenience stores randomly chosen within Jefferson County. Out of the 61 convenience stores, finalized signs were placed in 50 of them. Through one on one visits, each retail store's owner or key decision maker was informed about the initiative, its importance and incentive to support it. A toolkit was presented highlighting smoking related health statistics, research, and other information to get buy-in from the owner as a long term supporter of posting the signage. All participating owners were asked to sign a pledge of support stating their willingness to voluntarily comply. After a three month follow up to the 50 original convenience store owners that agreed to voluntarily post signage, there has been a 94 percent retention rate at the time of follow-up visits.



In order for a successful environmental systems change, this initiative proposed to use the existing food inspection platform as a vehicle for sustainability. Although JCDH does not have jurisdiction over all tobacco retail establishments, 80 percent of them also carry food permit. With such a high percentage of retailers holding JCDH issued food permits and thus undergoing routine health inspections by JCDH inspectors, the food permits provides the ideal avenue through which those retailers could be incentivized to voluntarily support the tobacco advisory signage initiative. In October 2011, the Jefferson County Board of Health unanimously voted to adopt a policy to incentivize convenience stores and other venues selling tobacco products (with a JCDH issued food permit) to voluntarily post tobacco advisory signage. The incentive includes awarding two points to the participating venue's overall health rating given no critical violations are assessed during routine health inspections. The two incentive points are awarded if signage is posted at the point of purchase or in other conspicuous areas. Because the compliance is voluntary, point of purchase placement was strongly recommended but not mandated. Monitoring of initiative through continues site visits and quarterly reports will provide compliance rates to further advance policy change. The Tobacco Retail Warnings Specialist provided technical assistance to the JCDH health inspectors. This technical assistance educated the inspectors on how to assess proper placement of signage with warrants awarding the incentive points and address any fundamental questions the retailers may have.

## PREVENTION IN ACTION

# Cutting Health Care Costs Through Prevention: Manatee County, Florida

By Kim Stroud, Benefits Manager, Manatee County

**M**anatee County has 3,200 employees, or, as we think of it, 6,900 lives, including families.

In early 2000, our health care costs were skyrocketing, mostly due to chronic conditions. At the time, the county was covering the entire share of the employee premium, but this became untenable. We had a decision to make: how do we continue to fund the increase in health care and do we continue to absorb those costs ourselves or do we shift them to the employee through premium increases or require more employee out of pocket expenses through the benefit design?

We knew both choices had their minuses, so we did neither.

Starting in 2006, we created the YourChoice Health Plan, which ties preventive health care and evidenced-based practices with employee plan level eligibility. The plan is a traditional PPO, but within it, we have four levels. The highest level, or the Ultimate plan, requires only a copay for office visits and hospitalization is paid at 100 percent.

Essentially the member pays only approximately six percent of a claim. However, we didn't allow employees to simply get into the plan. To qualify, employees had to take a comprehensive lab draw, wellness exam, complete a health risk assessment (HRA) and be prescreened for diabetes, nicotine exposure and other health indicators.

If the employee had diabetes, to enter the plan, he/she had to follow the American Association of Diabetes recommendations for treating the condition. If the employee was a tobacco user, they had to complete a four course education program.

After implementing the plan, our former benefits manager was in the elevator. An employee got on the elevator with him and got tears in her eyes. The employee said, "I can't thank you enough. By you forcing me to get my diabetes test, I now feel better than I have in 20 years. I am more productive and am better at work because, previously, my blood sugar was never under control." She was ecstatic to be healthy and productive — so much so that she grabbed and hugged him.

The plan worked: 93 percent of our employees did everything asked of them, which is remarkable. Quite simply, it is unheard of for 93 percent of a population to undertake a health risk assessment. (The other seven percent were moved to the alternative higher cost option plan.)

*"When my wife and I were first required to qualify for the Good, Better, Best medical insurance, I could not understand why we had to do the age based testing, but due to personal experiences, today I do and I am so GRATEFUL.*

—MANATEE EMPLOYEE

That said, we knew we had to continue to provide employees with the resources to help them make the healthy choices. So, we focused on on-site integrated person-to-person coaching and creating access to wellness resources, such as access to fitness equipment

For instance, we use an addiction model to work with our employees who use tobacco. After implementing the plan, only 13 percent of our employees use tobacco — the average in Florida is 20 percent. We saw dramatic decreases in known tobacco users when we implemented the plan. Often, tobacco-users are looking for ways to quit and they credit the plan with giving them a reason. And we know they quit because it is verified by lab tests.

*"I am currently taking the Pilates class on Tuesday evening and really enjoying it. I'm looking forward to continuing with something after this 12 week session.*

*I love the fitness center. Myself and my exercise buddy had been walking the parking garage (YUCK!!!!) and had been going over to the old gym which sometimes had WAAAYYYYY too much man stuff going on. Having the fitness center is a real blessing. I'm also so happy to finally be able to have classes downtown. I live out east and there was nothing for me out that way in the evening so being able to change here and just run downstairs is great."*

—MANATEE EMPLOYEE

### Defining Success

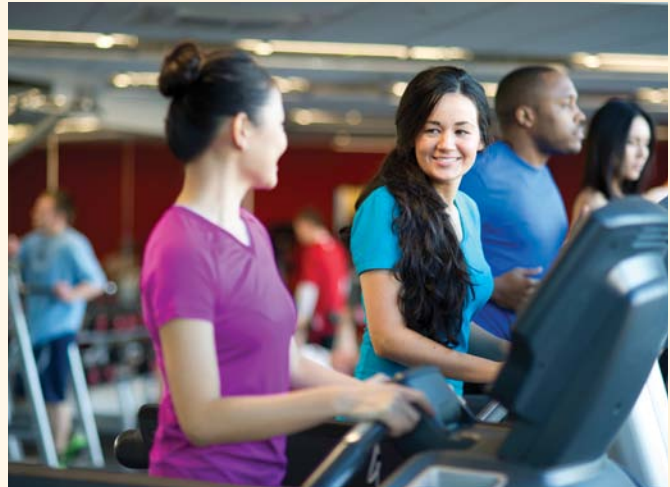
While we know our methods are improving lives, it can be hard to quantify success, i.e., how do you measure a claim that never occurred. For our plan to be successful, our outcomes needed to show that our plan drives employees to healthier habits and preventive care. We needed to catch and possibly prevent chronic conditions from ever developing.

We can show success through several avenues. For one, we have seen an annual reduction in out of range blood lipids (cholesterol), which indicates we are catching things early and people are getting interventions when they need it. We have a diabetic educator on staff who also ensures that all members with diabetes obtain annual routine eye and foot exams along with regular HbA1C checks. Before we implemented this practice we had \$500,000 in diabetes-related hospital fees. Since we created our plan, we spend \$70,000 on diabetes-related hospital fees.

In addition, when comparing 2010 to 2011, we achieved a negative trend: we spent approximately 4 percent less (over \$2 million) in 2011 than in 2010. We achieved these results by a 9.5 percent reduction in chronic care spending, a 22 percent reduction in inpatient hospitalization and an 11 percent reduction in emergency room costs. These outcomes clearly show that the efforts back in 2006 of directing employees to preventative care and creating our onsite integrated health management and wellness team that guides employees to better health is showing a significant return on investment.

Some people know what to do to get healthy and some people don't. Our plan helps those who know how to get healthy and those that don't — we see the plan as a nice blend of the carrot and the stick. We provide rewards but also requirements and it works.

To assist employees in improving their health, we have an on-site, integrated health management and wellness team that works together to deal with the whole person. On-site we have Registered Nurses, Behavioral Health Specialists, Registered Dietitians, Clinical Pharmacists and Exercise Physiologists. Before coming to Manatee, I was a therapist in the community. If I had someone who was depressed and had diabetes, I didn't have a lot of options to get that person connected with resources to help with the diabetes. At Manatee, if we have a diabetic employee who is depressed, our dietician can connect him with the therapist who is on-site and part of the health management team — we can treat the physical and emotional needs at the same time and prevent further complications.



*"I wanted to comment on the Diabetic Program. My husband was recently diagnosed as diabetic. About two months ago we both met with our counselor and she set my husband up with a diet and exercise program and provided the meter to test his blood daily.*

*To date, my husband has lost 20 pounds that he needed to lose and has a goal to lose another 20. Additionally, when he went to see his counselor yesterday to download the information from his meter, his sugar had been within the normal range every day for the last 6 weeks. These fantastic results are based on the suggestions for exercise, diet and 'carb counting' that our counselor helped with."*

**—MANATEE EMPLOYEE**



## PREVENTION IN ACTION

# Go the Greenway: Mecklenburg County, North Carolina

**T**here is a clear public need and desire for greenways and trail development in Mecklenburg County. In the fall 2007 and early 2008, a series of public meetings were held to provide public input into the Park and Recreation planning process. Greenways and trails were a major topic of discussion at these meetings. Additionally, a community survey conducted by ETC Leisure Vision found greenways and trail development was an important and unmet need for the majority of Mecklenburg County residents.

The results of the 2008 Mecklenburg County Park and Recreation Master Plan clearly reveal the public's appreciation for natural areas and their desire for a trail system.

Survey results indicate County residents understand and support the role of greenways as both corridors for environmental protection and potential trail development. Ninety-three percent of all residents felt the role of greenways as a connected network of walking, biking and nature trails was very important

### Connecting people and places

Mecklenburg County currently has 37 miles of developed and 150 miles of undeveloped greenways. The most notable being the Little Sugar Creek Greenway which stretches through the heart of Charlotte. When complete, the greenway will feature over 19 miles of trails and land connectors, from Toby Creek Greenway on North Tryon Street to Cordelia Park just north of uptown. The greenway will continue through the urban section and on to the South Carolina state line, conveniently linking Central Piedmont Community College, Carolina Healthcare System and the Park Road and Carolina Place shopping areas among many other destinations.

### Federal Support

In 2009, Park and Recreation received \$2.35 million in federal stimulus funding for the construction of Toby Creek Greenway in the University City area and West Branch Rocky River Greenway in Davidson.

The funding was provided by the American Recovery and Reinvestment Act (ARRA) of 2009 and obtained through the Mecklenburg Union County Metropolitan Planning Organization (MUMPO) through a competitive ranking process. Originally, the two projects were supposed to receive funding with 2004 Park and Recreation bonds that the County never issued due to the economic downturn.

Toby Creek Greenway and West Branch Rocky River Greenway will add to the Carolina Thread Trail greenway network which will eventually extend over 500 miles into 15 counties and to 2 million people.

"Both West Branch Rocky River Greenway and Toby Creek Greenway add important sections to our overall greenway system," said Park and Recreation Greenway Planner Gwen Cook. "Without the funding, neither project would be possible."

The impact of the stimulus money has enabled Park and Recreation's greenway division to continue carrying out its mission of providing natural transportation and fitness areas that help to improve water quality, reduce the impacts of flooding, and provide wildlife habitat.

### Improving the public's health

A region's trail network will contribute to the overall health of residents by offering people attractive, safe, accessible places to bike, walk, hike, jog, skate, and possibly places to enjoy water-based trails. In short, the trail network will create better opportunities for active lifestyles. The design of communities—including towns, subdivisions, transportation systems, parks, trails and other public recreational facilities—affects people's ability to reach the recommended 30 minutes each day of moderately intense physical activity (60 minutes for youth).

According to the Centers for Disease Control and Prevention (CDC), "Physical inactivity causes numerous physical and mental health problems, is responsible for an estimated 200,000 deaths per year, and contributes to the obesity epidemic."

In identifying a solution, the CDC determined that by creating and improving places in our communities to be physically active, there could be a 25 percent increase in the percentage of people who exercise at least three times a week. This is significant considering that for people who are inactive, even small increases in physical activity can bring measurable health benefits. Additionally, as people become more physically active outdoors, they make connections with their neighbors that contribute to the health of their community.

*The above was provided by Mecklenburg County Park and Recreation.*



# Recommendations

## 4 SECTION

America's future economic well-being is inextricably tied to our health. High rates of preventable diseases are one of the biggest drivers of health care costs in the country. And, right now, Americans are not as healthy and productive as they could or should be to compete in the global economy.

In tough economic times, it is more important than ever to invest in the health of Americans. Improving the health of Americans is essential for reducing health care costs and increasing our productivity — to help get the economy back on track for the long term.

The nation's public health system is responsible for keeping Americans healthy and safe. Public health is devoted to preventing disease and injury. If we successfully kept Americans healthier, we could significantly improve health, drive down trips to the doctor's office, and reduce health care costs.

In addition to shoring up the core ongoing funds for public health, we need to ensure the new Prevention Fund is used to build upon and expand existing efforts, not supplant. If we do not keep the foundation of support intact, we will never advance in the fight to prevent diseases, curb the obesity epidemic, or reduce smoking rates.

### **TFAH recommends that:**

- 1. Core funding for public health — at the federal, state and local levels — be increased;**
- 2. Funding be considered strategically — so funds are used efficiently to maximize effectiveness in lowering disease rates and improving health;**
- 3. The Prevention Fund be targeted to effectively and efficiently reduce rates of disease by focusing on efforts that help to modernize our approach to public health — from investing more in locally-determined, evidence-based prevention activities to strengthening the core capacity of health departments to operate in a reforming and technologically advanced health care system; and**
- 4. Accountability must be a cornerstone of public health funding — the use of funds and the outcomes achieved from the use of the funds should be transparent and clearly communicated with the public.**



## APPENDIX A: NOTES ON DATA AND METHODOLOGY

**T**he sources for the funds and indicators come from a variety of publicly available sources. In some cases fiscal years for funding may vary depending on availability of data, and year of health indicators may vary slightly as well.

### Funding References

**CDC Funds for State and Local Health Departments, Universities, & Other Public and Private Agencies** FY 2011 data were all provided by the U.S. Centers for Disease Control and Prevention's Financial Management Office. The total (all categories) was also provided by the CDC; it includes program areas not highlighted here. CDC Per Capita Total FY 2011 calculated by TFAH by dividing CDC provided total by July 1, 2011 U.S. Census Bureau population estimates. CDC Per Capita Ranking based on TFAH calculated per capita totals.

**HRSA Health Professions, HIV/AIDS, Maternal & Child Health, and Primary Health Care** FY 2011 funding data come from HRSA's Geospatial Data Warehouse, State Profile Report (accessed February 2012.) The total HRSA dollar amount also came from this source. HRSA key program area totals, however, were calculated by TFAH using Microsoft Excel. **HRSA Per Capita Total** FY 2011 calculated by TFAH by dividing HRSA Total dollars by July 1, 2011 U.S. Census Bureau population estimates. **HRSA Per Capita Ranking** based on TFAH calculated per capita totals.

**ASPR Hospital Preparedness Program** FY 2011 funding from U.S. Department of Health and Human Services: Office of the Assistant Secretary for Preparedness and Response Office of Preparedness and Emergency Operations Division of National Healthcare Preparedness Programs. "FY11 Revised Hospital Preparedness Program Funding Table." (accessed November 1, 2011).

**State Public Health Budget Methodology** TFAH conducted an analysis of state spending on public health for the last budget cycle, fiscal year 2010-2011. For those states that only report their budgets in biennium cycles, the 2009-2011 period (or the 2010-2012 and 2010-2011 for Virginia and Wyoming respectively) was used, and the percent change was calculated from the last biennium, 2007-2009 (or 2008-2010 and 2009-2010 for Virginia and Wyoming respectively).

This analysis was conducted from August to October of 2011 using publicly available budget documents through state government web sites. Based on what was made publicly available, budget documents used included either executive budget document that listed actual expenditures, estimated expenditures, or final appropriations; appropriations bills enacted by the state's legislature; or documents from legislative analysis offices.

"Public health" is defined to broadly include all health spending with the exception of Medicaid, CHIP, or comparable health coverage programs for low-income residents. Federal funds, mental health funds, addiction or substance abuse-related funds, WIC funds, services related to developmental disabilities or severely disabled persons, and state-sponsored pharmaceutical programs also were not included in order to make the state-by-state comparison more accurate since many states receive federal money for these particular programs. In a few cases, state budget documents did not allow these programs, or other similar human services, to be disaggregated; these exceptions are noted. For most states, all state funding, regardless of general revenue or other state funds (e.g. dedicated revenue, fee revenue, etc.), was used. In some cases, only general revenue funds were used in order to separate out federal funds; these exceptions are also noted.

Because each state allocates and reports its budget in a unique way, comparisons across states are difficult. This methodology may include programs that, in some cases, the state may consider a public health function, but the methodology used was selected to maximize the ability to be consistent across states. As a result, there may be programs or items states may wish to be considered "public health" that may not be included in order to maintain the comparative value of the data.

Finally, to improve the comparability of the budget data between FY 2009-2010 and FY 2010-2011 (or between biennium), TFAH adjusted the FY 2010-2011 numbers for inflation (using a 0.9652 conversion factor based on the U.S. Dept. of Labor Bureau of Labor Statistics; Consumer Price Index Inflation Calculator at <http://www.bls.gov/cpi/>).

After compiling the results from this online review of state budget documents, TFAH coordinated with the Association of State and Territorial Health Officials (ASTHO) to confirm the findings with each state health official. ASTHO sent out emails on October 26, 2011 and state health officials were asked to confirm or correct the data with TFAH staff by November 11, 2011. ASTHO followed up via email with those state health officials who did not respond by the November 11, 2011 deadline. In the end, 10 states did not respond by November 18, 2011 when the report went to print. These states were assumed to be in accordance with the findings.

## Population Facts

**U.S. Total Population** estimates come from the U.S. Census Bureau 2011, National and State Population Estimates, [Resident Population Data](#), released December 2011 (accessed January 3, 2012).

**Total Number of U.S. Uninsured, All Ages** estimates come from the U.S. Census Bureau, Current Population Survey, [Table HI06. Health Insurance](#)

[Coverage Status by State for All People: 2010](#). (accessed November 1, 2011).

**Total Number of Uninsured, under 18** estimates come from the U.S. Census Bureau. Current Population Survey, [Table HI05: Health Insurance Coverage Status and Type of Coverage by State and Age for All People: 2010](#) (November 1, 2011).

## Adult Health Indicator References

*\*\*Note: Some Behavioral Risk Factor Surveillance System (BRFSS) statistics use three years of combined data to “stabilize” yearly figures. TFAH contracted with Dr. Edward Okeke to carry out this data analysis.*

**Adult Physical Inactivity Rate 2008-2010 3 Yr Average** data come from the BRFSS Prevalence Data 2008-2010, percent responding “did not engage in any physical activity”. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data.

**AIDS Cumulative Cases Aged 13 and Older 2009 Yr End** data come from the U.S. Centers for Disease Control and Prevention, National Center for HIV, STD, and TB Prevention, [Table 20. HIV/AIDS Surveillance Report: Cases of HIV Infection and AIDS in the United States, 2009 Cumulative](#) (accessed November 2, 2011).

**Alzheimer’s Estimated Cases among 65+ (2025)** data come from the [Alzheimer’s Association report Alzheimer’s Disease Facts and Figures 2011](#) (November 1, 2011).

**Asthma 2010** data come from the BRFSS Prevalence Data 2010, percent responding “ever been told” they have asthma. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data.

**Breast Feeding Report Card 2008** data come from “[Breastfeeding Report Card, United States: Outcome Indicators.](#)” CDC National Immunization Survey, [Provisional Data, 2008 births](#). (accessed November 2, 2011).

**Cancer Estimated New Cases 2011** data come from the [American Cancer Society’s Cancer Facts and Figures 2011](#) (accessed November 2, 2011).

**Chlamydia Rates per 100,000 Population (2010)** data come from the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, [U.S. Centers for Disease Control and Prevention Sexually Transmitted Disease Surveillance, 2010](#) (accessed November 29, 2011).

**Diabetes 2008-2010 3 Yr Average** data come from the BRFSS Prevalence Data 2008-2010, percent

responding “ever been told” they have diabetes. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data.

**Fruit and Vegetable Intake 2005-2009 3 Yr Average** data come from the BRFSS Prevalence Data 2005-2009, percent who consume the recommended at least 5 servings of fruit and vegetables daily. Available at BRFSS Data.

**Human West Nile Virus Cases 2011** data come from the [2011 West Nile Virus Human Infections in the United States](#) (accessed November 2, 2011).

**Hypertension 2005-2009 3 Yr Average** data come from the BRFSS Prevalence Data 2005-2009, percent responding “ever been told” they have high blood pressure. Hypertension data is collected only on odd-numbered years. To stabilize the data, researchers used combined data from 2005, 2007 and 2009. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data.

**Obesity 2008-2010 3 Yr Average** data were calculated by contractors using self-reported height and weight measure from the BRFSS Prevalence Data 2008-2010. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data. Obesity was defined as having a BMI greater than or equal to 30.

**Pneumococcal Vaccination Rates 65 and Over 2010** data come from the BRFSS Prevalence Data 2010. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data.

**Seasonal Flu Vaccination Rates 65 and Over 2010** data come from the BRFSS Prevalence Data 2010. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data.

**Syphilis Rates per 100,000 Population (2010)** data come from the Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, U.S. Centers for Disease Control and Prevention Sexually Transmitted Disease Surveillance, 2010 (accessed November 19, 2011).

**Tobacco Use - Current Smokers 2010** data come from the BRFSS Prevalence Data 2010,

percent responding they are current smokers. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at BRFSS Data.

**Tuberculosis (TB) Number of Cases 2010** data come from "Reported Tuberculosis in the United States, 2010," U.S. Centers for Disease Control and Prevention (accessed November 2, 2011).

## Child and Adolescent Health Facts

**AIDS Cumulative Cases Children Under 13 2009** data come from the U.S. Centers for Disease Control and Prevention, National Center for HIV, STD, and TB Prevention, Table 20, HIV/AIDS Surveillance Report: Cases of HIV Infection and AIDS in the United States, 2009 Cumulative (accessed November 2, 2011).

**Asthma 2009 High School Students** data come from the Youth Risk Behavior Surveillance System, Comprehensive Results 2009, percent responding "ever been told" they have asthma. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at: <http://www.cdc.gov/mmwr/pdf/ss/ss5905.pdf> (accessed October 19, 2010).

**Fruit and Vegetable Behavioral Indicator Students** data come from the Youth Risk Behavior Surveillance System, Comprehensive Results 2009, percent responding "ate fruits or vegetables five or more times/day" in the past seven days. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at: <http://www.cdc.gov/mmwr/pdf/ss/ss5905.pdf> (accessed October 19, 2010).

**Immunization Gap: Children Aged 19 to 35 Months without All Immunizations 2010** data come from Estimated Vaccination Coverage with Individual Vaccines and Selected Vaccination Series Among Children 19-35 Months of Age by State and Local Area U.S., National Immunization Survey, 2010 (accessed November 3, 2011). TFAH used the data for the **4:3:1:3:3:1:4 series** which is the CDC-recommended series for children aged 19–35 months. The 4:3:1:3:3:1:4 series is used to evaluate progress toward one of the Healthy People 2020 objectives, which aims to achieve greater than 80% coverage with the series among children ages 19–35 months.

**Infant Mortality per 1,000 Live Births 2008** data come from the National Center for Health Statistics, National Vital Statistics Report, Deaths: Final Data for 2008 (accessed January 3, 2012).

**Low Birthweight Babies 2009** data come from the National Center for Health Statistics, National Vital Statistics Report, Births: Final Data for 2009, State-specific Detailed Tables for 2009, Table I-9 (accessed November 3, 2011).

**Obese High School Students 2009** data come from the Youth Risk Behavior Surveillance System, Comprehensive Results 2009. National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>.

**Obese 10 to 17 Year Olds 2007** data come from the National Survey of Children's Health, 2007. Child and Adolescent Health Measurement Initiative. 2007 National Survey of Children's Health, Data Resource Center for Child and Adolescent Health website. Available at <http://www.nschedata.org/Content/Default.aspx> (accessed July 6, 2009).

**Pre-Term Births as Percent of Live Births 2009** data the National Center for Health Statistics, National Vital Statistics Report, Births: Final Data for 2009, Table I-8 (accessed November 3, 2011).

**Tobacco: Current Smokers High School Students 2009** data come from the Youth Risk Behavior Surveillance System, Comprehensive Results 2009, percent of "students who smoked cigarettes on one or more of the past 30 days." National Center for Chronic Disease Prevention & Health Promotion, Centers for Disease Control and Prevention. Available at <http://www.cdc.gov/mmwr/pdf/ss/ss5905.pdf> (accessed October 19, 2010).



## Other Public Health Indicators

**Health Professions Shortage Areas: Primary Care, Mental Health, Dental Care FY 2011** data come from HRSA's Geospatial Data Warehouse, State Profile Report (accessed October 28, 2011).

## Pandemic Preparedness Key Facts

*Ready or Not 2010* Emergency Preparedness Indicators are from TFAH's *Ready or Not 2010, Protecting the Public's Health from Disease, Disasters, and Bioterrorism*, December 2010.

Potential # of Deaths During a Severe Pandemic estimates in each state used the same assumptions of a 30 percent attack rate and a 2.5 percent case fatality rate. The rates were calculated using the Flu Aid computer modeling program developed by CDC, which also considers the age and health risk factors of a state's population.<sup>40</sup> It should be noted that Flu Aid is limited in its ability to account for density issues, such as how close people live together in cities versus rural areas.

**Potential # of Episodes of Illness During a Severe Pandemic** estimates in each state used the same assumptions of a 30 percent attack rate and a 2.5 percent case-fatality rate. The rates were calculated using the Flu Aid computer

**Projected Supply vs. Demand for RNs (2010)** data comes from the National Center for Health Workforce Analysis in the Bureau of Health Professions, Health Resources and Services Administration paper "What Is Behind HRSA's Projected Supply, Demand and Shortage of Registered Nurses?" Washington, D.C.: September 2004.

modeling program developed by CDC, which also considers the age and health risk factors of a state's population. It should be noted that Flu Aid is limited in its ability to account for density issues, such as how close people live together in cities versus rural areas.

**Potential Financial Loss during a Severe Pandemic, % of GDP** data comes from: Trust for America's Health. *Pandemic Flu and the Potential for U.S. Economic Recession*. Washington, D.C.: Trust for America's Health, 2007. Available at: <http://healthyamericans.org/reports/flurecession/>.

**Potential Financial Loss during a Severe Pandemic, dollar amount** data comes from: Trust for America's Health. *Pandemic Flu and the Potential for U.S. Economic Recession*. Washington, D.C.: Trust for America's Health, 2007. Available at: <http://healthyamericans.org/reports/flurecession/>.

## APPENDIX B: STATE-BY-STATE ADULT HEALTH INDICATORS

Adult Health Indicators											
State	2011 Census Population Estimates	% Uninsured, All Ages (2010)	Adult Physical Inactivity Rate 2008-2010 3 Yr Average (95% Conf Interval)	AIDS Cumulative Cases Aged 13 and Older – 2009 Yr End	Alzheimer's Estimated Cases among 65+ (2025)	Asthma Prevalence 2010	Percent Exclusive Breastfeeding at 6 Months- from Births 2008 ^	Cancer Estimated New Cases - 2011	Chlamydia Rates per 100,000 Population (2010)	Diabetes 2008-2010 3 Yr. Ave. Percentage (95% Conf Interval)	
Alabama	4,802,740	15.4%	30.5% (+/- 1.0)	9,974	110,000	11.8%	5.9%	25,530	574.3	12.2% (+/- 0.6)	
Alaska	722,718	18.0%	22.8% (+/- 1.6)	735	7,700	14.4%	17.1%	3,090	861.7	5.9% (+/- 0.8)	
Arizona	6,482,505	19.1%	21.4% (+/- 1.1)	12,293	130,000	14.8%	12.3%	31,550	407.2	9.2% (+/- 0.7)	
Arkansas	2,937,979	18.7%	29.7% (+/- 1.1)	4,524	76,000	13.6%	13.7%	16,070	533.8	9.8% (+/- 0.6)	
California	37,691,912	19.4%	21.9% (+/- 0.6)	160,998	660,000	12.6%	25.7%	163,480	407.0	8.7% (+/- 0.4)	
Colorado	5,116,796	13.0%	18.3% (+/- 0.6)	9,952	110,000	14.7%	24.0%	22,390	387.0	5.9% (+/- 0.3)	
Connecticut	3,580,709	11.0%	21.6% (+/- 0.8)	16,282	76,000	15.3%	16.2%	21,440	359.5	6.9% (+/- 0.5)	
Delaware	907,135	11.3%	23.3% (+/- 1.1)	4,181	16,000	15.1%	11.4%	5,130	504.3	8.4% (+/- 0.6)	
D.C.	617,996	12.5%	20.7% (+/- 0.5)	20,660	10,000	15.5%	17.1%	2,830	932.0	8.8% (+/- 0.6)	
Florida	19,057,542	20.8%	24.5% (+/- 0.8)	120,701	590,000	13.8%	12.9%	113,400	403.2	9.9% (+/- 0.5)	
Georgia	9,815,210	19.4%	24.1% (+/- 1.0)	39,207	160,000	11.5%	10.1%	44,580	459.3	9.7% (+/- 0.6)	
Hawaii	1,374,810	7.7%	19.5% (+/- 0.8)	3,235	34,000	17.6%	20.8%	6,710	464.4	8.3% (+/- 0.5)	
Idaho	1,584,985	19.2%	20.7% (+/- 0.8)	707	38,000	13.6%	22.1%	7,520	272.2	7.7% (+/- 0.5)	
Illinois	12,869,257	14.8%	25.8% (+/- 1.0)	38,886	240,000	13.6%	14.3%	65,610	469.9	8.4% (+/- 0.5)	
Indiana	6,516,922	13.4%	27.1% (+/- 0.9)	9,635	130,000	14.2%	11.4%	34,050	355.4	9.6% (+/- 0.5)	
Iowa	3,062,309	12.3%	24.7% (+/- 0.9)	2,029	77,000	11.6%	17.0%	17,500	350.5	7.4% (+/- 0.4)	
Kansas	2,871,238	12.7%	24.2% (+/- 0.6)	3,284	62,000	13.2%	10.6%	14,070	340.6	8.4% (+/- 0.4)	
Kentucky	4,369,356	14.9%	29.8% (+/- 0.9)	5,552	97,000	14.9%	9.8%	25,010	379.6	10.5% (+/- 0.5)	
Louisiana	4,574,836	20.0%	29.5% (+/- 0.8)	20,521	100,000	11.6%	7.8%	22,780	648.9	10.7% (+/- 0.5)	
Maine	1,328,188	9.4%	22.2% (+/- 0.4)	1,301	28,000	15.7%	18.5%	8,820	196.2	8.4% (+/- 0.4)	
Maryland	5,828,289	13.1%	23.6% (+/- 0.8)	35,981	100,000	12.4%	13.1%	28,890	459.6	9.1% (+/- 0.5)	
Massachusetts	6,587,536	5.6%	21.2% (+/- 0.6)	21,787	140,000	15.3%	14.1%	37,470	319.7	7.5% (+/- 0.3)	
Michigan	9,876,187	13.0%	24.1% (+/- 0.7)	17,126	190,000	15.8%	16.3%	57,010	496.3	9.5% (+/- 0.4)	
Minnesota	5,344,861	9.8%	17.6% (+/- 0.9)	5,707	110,000	10.9%	15.0%	27,600	290.4	6.3% (+/- 0.4)	
Mississippi	2,978,512	21.1%	32.6% (+/- 0.9)	7,905	65,000	11.6%	5.7%	14,990	725.5	11.8% (+/- 0.5)	
Missouri	6,010,688	14.0%	27.2% (+/- 1.1)	13,042	130,000	14.2%	12.0%	32,740	435.1	8.8% (+/- 0.6)	
Montana	998,199	18.1%	22.3% (+/- 0.9)	485	29,000	12.9%	23.0%	5,690	316.1	6.8% (+/- 0.4)	
Nebraska	1,842,641	13.3%	24.5% (+/- 0.8)	1,743	44,000	12.2%	13.4%	9,430	284.6	7.6% (+/- 0.4)	
Nevada	2,723,322	21.3%	25.0% (+/- 1.3)	6,834	42,000	14.5%	11.5%	12,800	365.7	8.3% (+/- 0.8)	
New Hampshire	1,318,194	10.3%	20.9% (+/- 0.8)	1,248	26,000	15.0%	19.6%	8,210	185.9	7.4% (+/- 0.4)	
New Jersey	8,821,155	15.4%	26.6% (+/- 0.7)	54,483	170,000	13.3%	10.3%	49,080	300.2	8.8% (+/- 0.4)	
New Mexico	2,082,224	21.6%	22.6% (+/- 0.9)	3,032	43,000	14.6%	14.9%	9,630	582.5	8.3% (+/- 0.5)	
New York	19,465,197	15.0%	25.5% (+/- 0.8)	199,433	350,000	14.7%	13.7%	107,260	511.3	8.7% (+/- 0.4)	
North Carolina	9,656,401	17.0%	25.6% (+/- 0.7)	19,847	210,000	12.6%	8.2%	48,870	448.2	9.6% (+/- 0.4)	
North Dakota	683,932	13.1%	25.7% (+/- 1.0)	184	20,000	10.6%	18.7%	3,560	371.7	7.5% (+/- 0.5)	
Ohio	11,544,951	13.7%	26.2% (+/- 0.8)	18,099	250,000	13.8%	8.6%	65,060	443.1	10.0% (+/- 0.5)	
Oklahoma	3,791,508	17.0%	30.9% (+/- 0.8)	5,610	96,000	14.2%	11.9%	18,980	387.9	10.5% (+/- 0.5)	
Oregon	3,871,859	16.2%	18.1% (+/- 0.9)	6,795	110,000	16.2%	21.0%	21,180	322.9	7.4% (+/- 0.5)	
Pennsylvania	12,742,886	11.0%	25.8% (+/- 0.7)	38,282	280,000	13.8%	14.4%	78,030	377.0	9.4% (+/- 0.4)	
Rhode Island	1,051,302	11.4%	24.4% (+/- 0.9)	2,940	24,000	16.7%	12.9%	6,090	330.4	7.4% (+/- 0.5)	
South Carolina	4,679,230	20.6%	27.1% (+/- 0.9)	15,916	100,000	12.9%	7.1%	25,510	581.5	10.4% (+/- 0.5)	
South Dakota	824,082	13.0%	25.3% (+/- 0.9)	313	21,000	11.6%	15.2%	4,430	392.9	6.9% (+/- 0.4)	
Tennessee	6,403,353	14.7%	29.9% (+/- 1.2)	14,671	140,000	9.3%	12.8%	34,750	449.9	10.6% (+/- 0.7)	
Texas	25,674,681	24.6%	27.5% (+/- 0.9)	79,568	470,000	12.8%	13.5%	105,000	483.7	9.6% (+/- 0.5)	
Utah	2,817,222	13.6%	18.4% (+/- 0.7)	2,568	50,000	14.3%	17.0%	10,530	240.3	6.2% (+/- 0.4)	
Vermont	626,431	9.5%	19.2% (+/- 0.7)	511	13,000	17.2%	25.5%	3,950	202.2	6.5% (+/- 0.4)	
Virginia	8,096,604	14.1%	22.9% (+/- 1.2)	19,871	160,000	12.9%	14.5%	38,720	390.7	8.3% (+/- 0.5)	
Washington	6,830,038	13.8%	19.0% (+/- 0.5)	13,253	150,000	15.8%	23.0%	35,360	320.3	7.4% (+/- 0.3)	
West Virginia	1,855,364	13.5%	32.4% (+/- 1.0)	1,803	50,000	10.7%	5.6%	11,080	213.0	12.0% (+/- 0.6)	
Wisconsin	5,711,767	9.4%	22.3% (+/- 1.0)	5,192	130,000	12.8%	14.7%	30,530	410.9	7.5% (+/- 0.6)	
Wyoming	568,158	17.3%	23.0% (+/- 0.8)	276	15,000	14.7%	17.2%	2,680	388.2	7.2% (+/- 0.4)	
<b>U.S. Total</b>	<b>311,591,917</b>	<b>16.3%</b>	<b>N/A*</b>	<b>1,099,163</b>	<b>6,479,700</b>	<b>13.5%</b>	<b>14.8%</b>	<b>1,596,670</b>	<b>426.0</b>	<b>N/A*</b>	

Notes ^ The AAP Section on Breastfeeding, American Academy of Family Physicians, World Health Organization, United Nations Children's Fund, and many other health organizations recommend exclusive breastfeeding for the first 6 months of life.

State	Fruits and Vegetables (5 or more servings a day) 2005-2009 3 Yr Average (95% Conf Interval)	Human West Nile Virus Cases 2010 (as of 12/13/11)	Hypertension 2005-2009 3 Yr Average (95% Conf Interval)	Obesity 2008-2010 3 Yr. Ave. Percentage (95% Conf Interval)	Pneumococcal Vaccination Rates 65 and Over 2010	Poverty 2006-2008 3 Yr Average (90% Conf Interval)	Seasonal Flu Vaccination Rates 65 and Over 2010	Syphilis Rates per 100,000 Population (2010)	Tobacco Use -Current Smokers 2010	Tuberculosis Number of Cases — 2009
Alabama	20.3% (+/- 0.9)	5	33.9% (+/- 1.0)	32.3% (+/- 1.0)	65.6%	14.4% (+/- 1.5)	63.2%	5.5	21.9%	146
Alaska	24.1% (+/- 1.6)	0	24.3% (+/- 1.4)	25.9% (+/- 1.6)	66.5%	8.2% (+/- 1.2)	63.7%	0.4	20.4%	57
Arizona	25.4% (+/- 1.4)	42	24.7% (+/- 1.2)	25.4% (+/- 1.4)	71.8%	15.6% (+/- 1.4)	67.2%	3.5	13.5%	283
Arkansas	21.1% (+/- 0.9)	1	31.6% (+/- 1.0)	30.6% (+/- 1.2)	67.3%	15.6% (+/- 1.6)	69.6%	7.1	22.9%	78
California	28.5% (+/- 0.8)	154	25.5% (+/- 0.7)	24.8% (+/- 0.6)	62.6%	13.2% (+/- 0.5)	63.0%	5.6	12.1%	2,327
Colorado	25.0% (+/- 0.7)	7	21.2% (+/- 0.6)	19.8% (+/- 0.7)*	73.3%	10.2% (+/- 1.3)	73.4%	2.7	16.0%	71
Connecticut	28.1% (+/- 0.9)	9	25.7% (+/- 0.8)	21.8% (+/- 0.9)	69.2%	8.3% (+/- 1.2)	72.4%	2.8	13.2%	85
Delaware	22.5% (+/- 1.1)	1	29.4% (+/- 1.1)	28.0% (+/- 1.2)	70.0%	9.4% (+/- 1.3)	66.9%	1.0	17.3%	20
D.C.	32.1% (+/- 1.2)	4	27.3% (+/- 1.1)	21.7% (+/- 1.0)	65.4%	17.6% (+/- 1.9)	62.0%	22.3	14.8%	44
Florida	25.7% (+/- 0.8)	23	29.0% (+/- 0.8)	26.1% (+/- 0.9)**	69.9%	12.4% (+/- 0.7)	65.6%	6.4	17.1%	835
Georgia	24.3% (+/- 1.0)	12	29.5% (+/- 1.0)	28.7% (+/- 1.1)	64.4%	13.9% (+/- 1.0)	61.8%	8.1	17.6%	411
Hawaii	25.6% (+/- 0.9)	0	27.8% (+/- 0.9)	23.1% (+/- 0.9)	66.8%	8.9% (+/- 1.2)	73.2%	2.7	14.5%	115
Idaho	23.4% (+/- 0.9)	2	25.2% (+/- 0.9)	25.7% (+/- 1.0)	66.2%	10.6% (+/- 1.3)	60.7%	0.4	15.7%	15
Illinois	23.7% (+/- 0.9)	34	27.5% (+/- 0.9)	27.7% (+/- 1.0)**	61.9%	11.0% (+/- 0.8)	65.5%	7.0	16.9%	372
Indiana	21.8% (+/- 0.8)	9	28.5% (+/- 0.8)	29.1% (+/- 0.9)**	68.8%	12.3% (+/- 1.2)	66.4%	2.7	21.2%	90
Iowa	19.3% (+/- 0.8)	9	26.5% (+/- 0.8)	28.1% (+/- 0.9)	70.3%	9.6% (+/- 1.3)	70.4%	0.6	16.1%	48
Kansas	19.1% (+/- 0.6)	4	26.6% (+/- 0.6)	29.0% (+/- 0.8)**	68.5%	12.4% (+/- 1.5)	68.6%	0.7	17.0%	46
Kentucky	18.8% (+/- 0.9)	5	31.6% (+/- 1.0)	31.5% (+/- 1.0)**	64.6%	16.5% (+/- 1.6)	67.7%	3.2	24.8%	90
Louisiana	18.9% (+/- 0.9)	10	32.5% (+/- 0.9)	31.6% (+/- 0.9)	67.4%	17.1% (+/- 1.6)	64.3%	12.2	22.1%	200
Maine	28.4% (+/- 0.9)	0	28.1% (+/- 0.8)	26.5% (+/- 0.8)**	71.8%	11.0% (+/- 1.5)	72.0%	2.4	18.2%	8
Maryland	27.6% (+/- 0.8)	20	28.2% (+/- 0.8)	27.1% (+/- 0.8)	66.5%	8.6% (+/- 1.1)	68.7%	5.8	15.2%	220
Massachusetts	27.5% (+/- 0.7)	5	25.6% (+/- 0.6)	22.3% (+/- 0.6)**	71.2%	11.5% (+/- 1.1)	72.4%	4.3	14.1%	222
Michigan	22.2% (+/- 0.7)	33	28.7% (+/- 0.7)	30.5% (+/- 0.8)*	67.8%	12.4% (+/- 0.9)	67.5%	2.4	18.9%	184
Minnesota	21.9% (+/- 1.0)	2	21.6% (+/- 0.8)	25.3% (+/- 1.0)	70.4%	9.1% (+/- 1.1)	72.0%	2.8	14.9%	135
Mississippi	17.1% (+/- 0.8)	52	34.8% (+/- 0.8)	34.4% (+/- 0.9)	67.6%	20.5% (+/- 1.7)	66.1%	7.7	22.9%	116
Missouri	20.9% (+/- 1.0)	10	29.1% (+/- 1.1)	30.3% (+/- 1.2)**	71.2%	12.5% (+/- 1.3)	67.1%	2.5	21.1%	107
Montana	25.2% (+/- 0.9)	1	25.7% (+/- 0.8)	23.8% (+/- 0.9)	71.8%	13.1% (+/- 1.5)	65.5%	0.3	18.8%	6
Nebraska	21.8% (+/- 0.9)	28	26.1% (+/- 0.8)	27.6% (+/- 0.9)	70.9%	10.2% (+/- 1.4)	71.2%	0.7	17.2%	27
Nevada	22.7% (+/- 1.4)	16	26.3% (+/- 1.3)	25.0% (+/- 1.4)	66.6%	10.0% (+/- 1.3)	59.3%	4.9	21.3%	114
New Hampshire	28.5% (+/- 0.9)	0	26.1% (+/- 0.8)	25.6% (+/- 0.9)	71.2%	6.1% (+/- 1.1)	71.3%	1.7	16.9%	10
New Jersey	26.6% (+/- 0.8)	7	27.2% (+/- 0.7)	24.1% (+/- 0.7)	64.3%	8.9% (+/- 0.9)	65.7%	2.8	14.4%	405
New Mexico	22.4% (+/- 0.8)	4	25.0% (+/- 0.8)	25.6% (+/- 0.9)	68.6%	16.7% (+/- 1.8)	69.3%	2.6	18.5%	51
New York	26.8% (+/- 0.9)	43	27.1% (+/- 0.8)	24.7% (+/- 0.8)	66.1%	14.2% (+/- 0.8)	68.3%	5.6	15.5%	954
North Carolina	21.6% (+/- 0.6)	2	29.9% (+/- 0.6)	29.4% (+/- 0.8)	71.2%	14.4% (+/- 1.1)	69.7%	4.2	19.8%	296
North Dakota	22.1% (+/- 0.9)	4	25.4% (+/- 0.9)	28.0% (+/- 1.1)	70.9%	10.8% (+/- 1.4)	66.4%	0.5	17.4%	12
Ohio	21.5% (+/- 0.8)	21	29.1% (+/- 0.8)	29.6% (+/- 0.8)	68.5%	12.9% (+/- 0.9)	64.8%	4.6	22.5%	190
Oklahoma	15.5% (+/- 0.6)	0	31.9% (+/- 0.8)	31.4% (+/- 0.8)**	72.6%	14.1% (+/- 1.5)	70.9%	2.5	23.7%	86
Oregon	26.4% (+/- 0.9)	0	25.8% (+/- 0.8)	25.4% (+/- 1.0)	74.0%	11.7% (+/- 1.5)	65.0%	1.9	15.1%	87
Pennsylvania	24.5% (+/- 0.7)	6	28.9% (+/- 0.7)	28.5% (+/- 0.8)	70.6%	10.9% (+/- 0.8)	68.0%	2.9	18.4%	238
Rhode Island	26.2% (+/- 1.0)	1	28.3% (+/- 0.9)	24.3% (+/- 1.0)**	71.7%	10.9% (+/- 1.4)	70.3%	3.9	15.7%	26
South Carolina	19.1% (+/- 0.7)	0	31.5% (+/- 0.8)	30.9% (+/- 1.0)*	70.0%	13.1% (+/- 1.5)	67.4%	3.4	21.0%	153
South Dakota	18.3% (+/- 0.8)	2	26.9% (+/- 0.8)	28.7% (+/- 1.0)	68.0%	11.1% (+/- 1.3)	72.0%	0.5	15.4%	15
Tennessee	25.4% (+/- 1.1)	18	32.2% (+/- 1.1)	31.9% (+/- 1.2)	66.1%	14.9% (+/- 1.3)	66.6%	4.4	20.1%	193
Texas	23.9% (+/- 0.7)	26	27.2% (+/- 0.7)	30.1% (+/- 0.9)**	68.5%	16.3% (+/- 0.7)	67.2%	5.0	15.8%	1,385
Utah	22.8% (+/- 0.9)	3	20.5% (+/- 0.7)	23.4% (+/- 0.8)	68.3%	8.8% (+/- 1.1)	68.2%	2.3	9.1%	20
Vermont	30.1% (+/- 0.9)	1	25.2% (+/- 0.7)	23.5% (+/- 0.8)**	72.8%	8.9% (+/- 1.4)	71.5%	0.6	15.4%	5
Virginia	26.6% (+/- 1.1)	8	27.2% (+/- 1.0)	25.9% (+/- 1.2)	72.1%	9.2% (+/- 0.9)	68.9%	3.5	18.5%	268
Washington	25.4% (+/- 0.5)	0	25.9% (+/- 0.5)	26.4% (+/- 0.5)	72.8%	9.5% (+/- 1.1)	69.3%	4.0	15.2%	239
West Virginia	18.6% (+/- 0.8)	1	34.1% (+/- 1.0)	32.2% (+/- 1.1)*	62.4%	14.9% (+/- 1.4)	66.4%	0.3	26.8%	15
Wisconsin	23.1% (+/- 1.0)	3	26.4% (+/- 1.0)	27.4% (+/- 1.1)	73.1%	10.3% (+/- 1.2)	68.4%	0.9	19.1%	55
Wyoming	23.2% (+/- 0.8)	3	24.9% (+/- 0.8)	25.4% (+/- 0.9)	69.4%	10.3% (+/- 1.4)	65.1%	0.0	19.5%	7
<b>U.S. Total</b>	<b>N/A*</b>	<b>667</b>	<b>N/A*</b>	<b>N/A*</b>	<b>68.8%</b>	<b>12.7% (+/- 0.2)</b>	<b>67.5%</b>	<b>4.5</b>	<b>17.3%</b>	<b>11,182</b>

## APPENDIX C: STATE-BY-STATE CHILD AND ADOLESCENT HEALTH INDICATORS

Child/Adolescent Health Indicators							
State	2011 Census Population Estimates	% Uninsured, under 18 (2010)	AIDS Cumulative Cases Under Age 13 - 2009 Yr End	Asthma - 2009 High School Students (95% Conf Interval)	Fruit and Vegetable Indicator - 2009 (95% Conf Interval)	Immunization Gap, % of Children Aged 19 to 35 Months Without All Immunizations - 2010	
Alabama	4,802,740	8.9	76	25.5% (+/- 2.8)	16.3% (+/- 3.1)	28.8%	
Alaska	722,718	13.7	7	18.5% (+/- 1.9)	17.2% (+/- 2.2)	35.0%	
Arizona	6,482,505	15.0	47	20.9% (+/- 2.6)	N/A	30.0%	
Arkansas	2,937,979	7.4	38	23.2% (+/- 2.3)	14.9% (+/- 2.6)	26.8%	
California	37,691,912	10.7	696	N/A	N/A	31.4%	
Colorado	5,116,796	7.8	32	21.7% (+/- 2.6)	24.4% (+/- 2.1)	34.3%	
Connecticut	3,580,709	6.0	188	N/A	21.0% (+/- 2.5)	29.9%	
Delaware	907,135	6.0	27	N/A	N/A	31.9%	
D.C.	617,996	5.1	192	N/A	N/A	22.7%	
Florida	19,057,542	14.2	1,577	20.7% (+/- 1.1)	21.6% (+/- 1.3)	20.1%	
Georgia	9,815,210	9.9	233	26.0% (+/- 3.0)	17.1% (+/- 2.3)	33.0%	
Hawaii	1,374,810	2.3	17	28.3% (+/- 2.5)	17.2% (+/- 1.8)	27.1%	
Idaho	1,584,985	9.0	3	17.6% (+/- 1.6)	18.5% (+/- 2.0)	42.6%	
Illinois	12,869,257	7.6	289	22.2% (+/- 2.6)	18.3% (+/- 2.2)	27.6%	
Indiana	6,516,922	6.0	57	23.6% (+/- 3.4)	16.1% (+/- 2.3)	29.8%	
Iowa	3,062,309	7.4	13	N/A	N/A	27.3%	
Kansas	2,871,238	7.5	16	21.1% (+/- 1.8)	20.5% (+/- 2.3)	26.0%	
Kentucky	4,369,356	6.8	37	24.3% (+/- 2.3)	14.2% (+/- 1.7)	35.8%	
Louisiana	4,574,836	9.0	134	22.4% (+/- 3.0)	13.9% (+/- 3.0)	31.0%	
Maine	1,328,188	4.4	8	26.3% (+/- 1.0)	N/A	33.0%	
Maryland	5,828,289	9.2	332	26.1% (+/- 3.4)	22.5% (+/- 3.5)	35.0%	
Massachusetts	6,587,536	3.8	227	N/A	N/A	22.8%	
Michigan	9,876,187	5.1	117	23.3% (+/- 1.8)	19.6% (+/- 3.5)	21.0%	
Minnesota	5,344,861	6.0	29	N/A	N/A	28.4%	
Mississippi	2,978,512	13.4	58	18.2% (+/- 2.1)	21.2% (+/- 2.8)	25.4%	
Missouri	6,010,688	8.9	63	20.6% (+/- 1.7)	20.4% (+/- 2.5)	34.5%	
Montana	998,199	8.8	3	19.5% (+/- 2.5)	18.4% (+/- 2.9)	39.6%	
Nebraska	1,842,641	10.3	12	N/A	N/A	23.4%	
Nevada	2,723,322	17.5	29	19.4% (+/- 2.0)	17.0% (+/- 2.2)	41.4%	
New Hampshire	1,318,194	5.5	10	N/A	N/A	19.0%	
New Jersey	8,821,155	9.2	809	24.2% (+/- 2.8)	20.1% (+/- 2.9)	38.3%	
New Mexico	2,082,224	13.7	8	25.3% (+/- 2.5)	20.9% (+/- 3.1)	34.6%	
New York	19,465,197	7.9	2,438	23.2% (+/- 2.2)	N/A	38.4%	
North Carolina	9,656,401	9.2	130	21.8% (+/- 1.9)	16.9% (+/- 1.8)	28.8%	
North Dakota	683,932	10.2	2	19.8% (+/- 2.0)	13.7% (+/- 1.8)	24.8%	
Ohio	11,544,951	8.3	151	N/A	N/A	26.2%	
Oklahoma	3,791,508	11.9	27	21.6% (+/- 3.6)	14.8% (+/- 2.1)	38.4%	
Oregon	3,871,859	10.4	19	N/A	N/A	33.0%	
Pennsylvania	12,742,886	8.2	375	22.0% (+/- 3.0)	20.4% (+/- 2.4)	24.9%	
Rhode Island	1,051,302	5.3	28	22.5% (+/- 1.6)	22.6% (+/- 3.1)	31.1%	
South Carolina	4,679,230	14.2	111	21.7% (+/- 2.9)	14.7% (+/- 2.8)	26.4%	
South Dakota	824,082	6.6	6	15.5% (+/- 1.9)	14.7% (+/- 3.0)	34.6%	
Tennessee	6,403,353	7.9	60	17.9% (+/- 1.7)	18.1% (+/- 2.1)	23.8%	
Texas	25,674,681	16.3	399	19.0% (+/- 1.9)	21.3% (+/- 1.7)	29.9%	
Utah	2,817,222	11.4	20	21.4% (+/- 2.2)	18.4% (+/- 3.1)	33.3%	
Vermont	626,431	4.1	6	N/A	22.6% (+/- 2.1)	31.0%	
Virginia	8,096,604	8.3	185	N/A	N/A	30.5%	
Washington	6,830,038	5.9	35	N/A	N/A	29.1%	
West Virginia	1,855,364	2.7	11	25.7% (+/- 3.0)	18.2% (+/- 2.8)	37.4%	
Wisconsin	5,711,767	4.6	34	N/A	19.1% (+/- 2.0)	19.9%	
Wyoming	568,158	10.2	2	21.2% (+/- 1.6)	19.1 (+/- 1.6)	37.9%	
<b>U.S. Total</b>	<b>311,591,917</b>	<b>9.8%</b>	<b>9,448</b>	<b>21.7%</b>	<b>18.4%</b>	<b>29.8%</b>	



State	Infant Mortality - Per 1,000 Live Births 2008 Final Data	% Low Birthweight Babies - 2009 Final Data	Obese - 2009 High School Students (95% Conf Interval)	Obese: % of 10 to 17 Year Olds (2007)	Pre-Term Births % of live births 2009 Final Data	Tobacco: Current Smokers High School Students 2009 (95% Conf Interval)
Alabama	9.5	10.3	13.5% (+/- 2.4)	17.9% (+/- 3.6)	15.6	20.8% (+/- 3.0)
Alaska	5.9	5.9	11.8% (+/- 2.0)	14.1% (+/- 3.1)	11.0	15.7% (+/- 2.9)
Arizona	6.4	7.1	13.1% (+/- 1.9)	17.8% (+/- 4.3)	12.7	19.7% (+/- 3.0)
Arkansas	7.4	8.9	14.4% (+/- 2.6)	20.4% (+/- 3.7)	13.1	20.3% (+/- 3.9)
California	5.1	6.8	N/A	15.0% (+/- 5.1)	10.3	N/A
Colorado	6.2	8.8	7.1% (+/- 2.2)	14.2% (+/- 4.5)	11.3	17.7% (+/- 5.0)
Connecticut	6.0	8.0	10.4% (+/- 2.2)	12.5% (+/- 2.9)	10.2	17.8% (+/- 2.6)
Delaware	8.4	8.6	13.7% (+/- 1.5)	13.3% (+/- 3.1)	12.5	19.0% (+/- 2.6)
D.C.	10.9	10.3	N/A	20.1% (+/- 4.0)	14.2	N/A
Florida	7.2	8.7	10.3% (+/- 1.1)	18.3% (+/- 5.1)	13.5	16.1% (+/- 1.4)
Georgia	8.1	9.4	12.4% (+/- 2.2)	21.3% (+/- 5.1)	13.8	16.9% (+/- 2.8)
Hawaii	5.5	8.4	14.5% (+/- 3.5)	11.2% (+/- 2.8)	12.6	15.2% (+/- 2.7)
Idaho	5.9	6.5	8.8% (+/- 1.5)	11.8% (+/- 2.7)	10.1	14.5% (+/- 2.2)
Illinois	7.1	8.4	11.9% (+/- 2.2)	20.7% (+/- 3.7)	12.4	18.1% (+/- 3.4)
Indiana	6.9	8.3	12.8% (+/- 2.5)	14.6% (+/- 3.2)	11.9	23.5% (+/- 3.3)
Iowa	5.7	6.7	N/A	11.2% (+/- 2.8)	11.3	N/A
Kansas	7.3	7.3	12.4% (+/- 2.2)	16.2% (+/- 3.8)	11.2	16.9% (+/- 2.9)
Kentucky	6.9	8.9	17.6% (+/- 2.7)	21.0% (+/- 3.6)	13.6	26.1% (+/- 4.1)
Louisiana	9.1	10.6	14.7% (+/- 2.8)	20.7% (+/- 4.0)	14.7	17.6% (+/- 3.1)
Maine	5.5	6.3	12.5% (+/- 0.8)	12.9% (+/- 2.8)	9.9	18.1% (+/- 1.1)
Maryland	8.0	9.1	12.2% (+/- 2.5)	13.6% (+/- 3.3)	12.7	11.9% (+/- 2.4)
Massachusetts	5.1	7.8	10.9% (+/- 1.8)	13.3% (+/- 3.6)	10.9	16.0% (+/- 2.2)
Michigan	7.4	8.4	11.9% (+/- 1.5)	12.4% (+/- 3.1)	12.4	18.8% (+/- 2.5)
Minnesota	6.0	6.5	N/A	11.1% (+/- 3.1)	10.1	N/A
Mississippi	10.0	12.2	18.3% (+/- 2.6)	21.9% (+/- 3.5)	18.0	19.6% (+/- 3.0)
Missouri	7.2	8.1	14.4% (+/- 2.2)	13.6% (+/- 3.1)	12.2	18.9% (+/- 3.5)
Montana	6.8	7.1	10.4% (+/- 2.2)	11.8% (+/- 2.8)	10.9	18.7% (+/- 3.8)
Nebraska	5.4	7.1	N/A	15.8% (+/- 3.7)	11.5	N/A
Nevada	5.3	8.1	11.0% (+/- 1.9)	15.2% (+/- 4.5)	13.8	17.0% (+/- 2.4)
New Hampshire	4.0	6.9	12.4% (+/- 2.7)	12.8% (+/- 2.9)	9.9	20.8% (+/- 3.2)
New Jersey	5.6	8.3	10.3% (+/- 2.0)	15.4% (+/- 3.6)	12.0	17.0% (+/- 2.8)
New Mexico	5.6	8.3	13.5% (+/- 2.6)	16.0% (+/- 4.2)	12.3	24.0% (+/- 2.9)
New York	5.5	8.2	11.0% (+/- 1.7)	17.1% (+/- 3.7)	12.2	14.8% (+/- 2.1)
North Carolina	8.2	9.0	13.4% (+/- 2.5)	18.6% (+/- 3.9)	13.0	17.7% (+/- 3.1)
North Dakota	5.8	6.4	11.0% (+/- 1.6)	11.4% (+/- 2.5)	10.6	22.4% (+/- 3.1)
Ohio	7.7	8.6	N/A	18.5% (+/- 4.1)	12.3	N/A
Oklahoma	7.3	8.4	14.1% (+/- 2.9)	16.4% (+/- 3.5)	13.8	22.6% (+/- 4.8)
Oregon	5.2	6.3	N/A	9.6% (+/- 2.7)	9.8	N/A
Pennsylvania	7.4	8.3	11.8% (+/- 1.5)	15.0% (+/- 4.0)	11.5	18.4% (+/- 3.6)
Rhode Island	5.9	8.0	10.4% (+/- 2.1)	14.4% (+/- 3.2)	11.4	13.3% (+/- 2.8)
South Carolina	8.0	10.0	16.7% (+/- 4.5)	15.3% (+/- 3.1)	14.5	20.5% (+/- 3.0)
South Dakota	8.4	5.8	9.6% (+/- 2.1)	13.2% (+/- 3.2)	10.9	23.2% (+/- 4.0)
Tennessee	8.1	9.2	15.8% (+/- 2.1)	20.6% (+/- 3.7)	13.0	20.9% (+/- 4.0)
Texas	6.2	8.5	13.6% (+/- 1.8)	20.4% (+/- 5.1)	13.1	21.2% (+/- 2.4)
Utah	4.8	7.0	6.4% (+/- 1.9)	11.4% (+/- 3.6)	11.3	8.5% (+/- 2.4)
Vermont	4.6	6.7	12.2% (+/- 1.5)	12.9% (+/- 3.4)	9.3	17.6% (+/- 1.7)
Virginia	6.9	8.4	N/A	15.2% (+/- 3.2)	11.4	N/A
Washington	5.4	6.3	N/A	11.1% (+/- 3.5)	10.3	N/A
West Virginia	7.7	9.2	14.2% (+/- 2.4)	18.9% (+/- 3.2)	12.9	21.8% (+/- 3.2)
Wisconsin	7.0	7.1	9.3% (+/- 1.4)	13.1% (+/- 2.5)	10.9	16.9% (+/- 2.7)
Wyoming	7.0	8.4	9.8% (+/- 1.3)	10.2% (+/- 2.7)	11.2	22.1% (+/- 2.0)
<b>U.S. Total</b>	<b>6.6</b>	<b>8.2</b>	<b>N/A**</b>	<b>N/A*</b>	<b>12.2</b>	<b>N/A**</b>

## APPENDIX D: STATE-BY-STATE OTHER PUBLIC HEALTH INDICATORS

Other Public Health Indicators						
State	2011 Census Population Estimates	Health Professions Service Areas Primary Care (As of 10/31/11)	Health Professions Service Areas Mental Health (As of 10/31/11)	Health Professions Service Areas Dental Care (As of 10/31/11)	Nursing Shortage Estimates (2010)	ASPR Hospital Preparedness Program Funding by State 2011
Alabama	4,802,740	83	49	61	-200	\$5,386,508
Alaska	722,718	79	51	46	-2,300	\$1,211,937
Arizona	6,482,505	144	83	145	-12,500	\$7,051,765
Arkansas	2,937,979	101	43	54	-2,700	\$3,486,575
California	37,691,912	579	304	335	-47,600	\$28,666,533
Colorado	5,116,796	113	52	83	-10,900	\$5,550,503
Connecticut	3,580,709	41	27	40	-11,100	\$4,223,889
Delaware	907,135	11	7	7	-1,300	\$1,406,825
D.C.	617,996	13	7	8	-3,000	\$1,558,756
Florida	19,057,542	263	155	223	-32,700	\$19,720,658
Georgia	9,815,210	211	87	156	-16,400	\$10,449,266
Hawaii	1,374,810	30	31	26	-4,500	\$1,865,852
Idaho	1,584,985	68	27	63	-800	\$2,058,131
Illinois	12,869,257	260	130	172	-9,300	\$11,113,877
Indiana	6,516,922	105	52	45	-8,200	\$7,208,168
Iowa	3,062,309	124	63	132	-3,400	\$3,668,490
Kansas	2,871,238	162	63	132	-1,000	\$3,436,853
Kentucky	4,369,356	148	109	89	1,200	\$4,968,989
Louisiana	4,574,836	126	101	98	100	\$5,055,790
Maine	1,328,188	78	45	75	-2,500	\$1,904,184
Maryland	5,828,289	56	44	39	-7,000	\$6,466,757
Massachusetts	6,587,536	78	60	70	-16,100	\$7,339,572
Michigan	9,876,187	220	129	152	-3,100	\$11,226,706
Minnesota	5,344,861	125	50	111	-4,400	\$5,990,088
Mississippi	2,978,512	110	39	104	-500	\$3,592,473
Missouri	6,010,688	191	73	151	-12,900	\$6,707,932
Montana	998,199	103	63	77	-500	\$1,503,679
Nebraska	1,842,641	120	68	81	-2,400	\$2,378,867
Nevada	2,723,322	64	26	28	-4,100	\$3,151,521
New Hampshire	1,318,194	26	20	23	-3,300	\$1,897,087
New Jersey	8,821,155	35	30	31	-19,600	\$9,769,919
New Mexico	2,082,224	94	51	69	-3,100	\$2,576,778
New York	19,465,197	196	151	136	-21,500	\$12,285,085
North Carolina	9,656,401	127	81	119	-8,100	\$9,910,111
North Dakota	683,932	82	48	31	-900	\$1,175,614
Ohio	11,544,951	139	87	105	-12,100	\$12,695,478
Oklahoma	3,791,508	174	102	100	-500	\$4,302,943
Oregon	3,871,859	103	54	76	-5,300	\$4,432,087
Pennsylvania	12,742,886	180	118	154	-21,100	\$13,718,265
Rhode Island	1,051,302	19	16	16	-3,000	\$1,634,345
South Carolina	4,679,230	97	47	68	-5,200	\$5,091,363
South Dakota	824,082	88	49	54	-200	\$1,330,796
Tennessee	6,403,353	124	55	135	-18,500	\$6,916,279
Texas	25,674,681	444	357	250	-41,900	\$25,477,218
Utah	2,817,222	60	30	52	-1,500	\$3,209,463
Vermont	626,431	32	22	24	-600	\$1,162,908
Virginia	8,096,604	122	78	91	-11,000	\$8,620,629
Washington	6,830,038	156	107	111	-8,800	\$7,295,589
West Virginia	1,855,364	104	65	73	700	\$2,432,140
Wisconsin	5,711,767	117	114	81	500	\$6,403,834
Wyoming	568,158	42	23	23	-1,200	\$1,047,196
<b>U.S. Total</b>	<b>311,591,917</b>	<b>6,367</b>	<b>3,749</b>	<b>4,638</b>	<b>-405,800</b>	<b>\$321,736,271</b>

## APPENDIX E: STATE-BY-STATE FUNDING CHART — HRSA

FY 2011 HRSA Grants to States by Key Program Area (Selected Programs)							
State	Primary Health Care	Health Professions	Maternal & Child Health	HIV/AIDS	HRSA Total (All Programs)	HRSA Per Capita Total (All Programs)	HRSA Per Capita Ranking
Alabama	\$54,102,087	\$21,065,331	\$21,116,715	\$28,091,600	\$126,347,908	\$26.31	22
Alaska	\$47,359,913	\$1,527,627	\$4,267,386	\$2,006,597	\$59,949,156	\$82.95	1
Arizona	\$60,571,788	\$8,571,711	\$22,204,793	\$27,014,377	\$121,235,587	\$18.70	39
Arkansas	\$32,708,022	\$10,501,864	\$17,167,251	\$10,230,874	\$73,515,226	\$25.02	24
California	\$381,949,063	\$68,300,813	\$78,838,273	\$292,207,437	\$827,850,412	\$21.96	33
Colorado	\$84,860,198	\$12,537,768	\$14,962,563	\$27,515,783	\$143,696,964	\$28.08	20
Connecticut	\$49,643,056	\$7,332,514	\$9,310,135	\$31,551,487	\$98,247,575	\$27.44	21
Delaware	\$8,323,410	\$4,565,515	\$8,239,091	\$7,207,698	\$28,615,714	\$31.55	14
D.C.	\$18,937,126	\$18,778,667	\$26,423,021	\$74,718,023	\$139,185,860	N/A*	N/A*
Florida	\$131,539,715	\$23,415,099	\$32,096,562	\$230,915,441	\$421,186,942	\$22.10	32
Georgia	\$60,742,369	\$16,009,364	\$29,244,126	\$85,148,277	\$195,112,699	\$19.88	36
Hawaii	\$41,285,195	\$6,495,215	\$10,780,783	\$4,388,727	\$64,454,665	\$46.88	2
Idaho	\$36,874,094	\$1,179,297	\$5,223,301	\$2,844,760	\$47,854,484	\$30.19	16
Illinois	\$153,740,496	\$21,400,071	\$45,327,764	\$83,815,330	\$309,282,921	\$24.03	27
Indiana	\$45,976,801	\$6,754,963	\$28,825,136	\$16,489,766	\$100,625,322	\$15.44	46
Iowa	\$35,812,207	\$6,402,090	\$10,582,787	\$5,379,308	\$61,751,878	\$20.17	34
Kansas	\$16,866,577	\$5,768,995	\$8,470,136	\$4,961,942	\$39,250,735	\$13.67	47
Kentucky	\$56,659,884	\$5,810,279	\$15,953,808	\$14,114,690	\$96,796,214	\$22.15	30
Louisiana	\$53,961,768	\$12,505,960	\$27,024,902	\$47,789,469	\$144,770,300	\$31.64	13
Maine	\$25,531,436	\$2,765,806	\$11,883,951	\$2,862,293	\$46,016,429	\$34.65	10
Maryland	\$41,126,516	\$6,288,208	\$22,631,899	\$137,059,486	\$209,561,015	\$35.96	8
Massachusetts	\$108,689,802	\$34,718,384	\$36,666,864	\$75,143,318	\$256,520,190	\$38.94	7
Michigan	\$79,688,615	\$25,121,512	\$34,639,241	\$31,165,974	\$177,946,689	\$18.02	43
Minnesota	\$21,199,652	\$11,396,717	\$16,049,418	\$14,454,957	\$68,959,213	\$12.90	49
Mississippi	\$50,531,598	\$4,984,886	\$13,307,058	\$16,558,324	\$88,436,075	\$29.69	18
Missouri	\$74,164,643	\$17,494,367	\$20,526,748	\$29,915,431	\$148,876,171	\$24.77	25
Montana	\$21,524,480	\$5,149,329	\$7,761,669	\$1,963,031	\$40,961,605	\$41.04	5
Nebraska	\$18,870,815	\$6,844,582	\$8,576,317	\$3,620,441	\$40,733,955	\$22.11	31
Nevada	\$10,086,736	\$2,670,292	\$4,326,524	\$16,230,447	\$34,763,422	\$12.77	50
New Hampshire	\$10,345,560	\$1,426,320	\$6,782,895	\$2,304,213	\$22,335,235	\$16.94	44
New Jersey	\$51,191,495	\$7,660,665	\$18,783,377	\$83,168,667	\$162,225,986	\$18.39	41
New Mexico	\$71,610,005	\$3,513,272	\$11,288,971	\$5,768,340	\$94,041,564	\$45.16	3
New York	\$170,483,154	\$34,783,045	\$60,150,403	\$348,041,238	\$617,057,839	\$31.70	12
North Carolina	\$84,174,154	\$12,530,770	\$27,524,584	\$54,115,039	\$181,940,453	\$18.84	37
North Dakota	\$4,429,614	\$3,443,022	\$2,884,283	\$553,787	\$15,227,478	\$22.26	29
Ohio	\$77,761,993	\$41,274,880	\$34,312,935	\$35,117,511	\$292,343,980	\$25.32	23
Oklahoma	\$30,906,416	\$3,901,603	\$23,133,618	\$10,722,070	\$70,897,793	\$18.70	39
Oregon	\$81,190,808	\$4,002,635	\$15,192,421	\$12,637,274	\$115,271,624	\$29.77	17
Pennsylvania	\$66,635,447	\$54,206,597	\$41,385,877	\$87,559,305	\$256,684,149	\$20.14	35
Rhode Island	\$19,691,395	\$2,385,199	\$7,893,620	\$6,458,328	\$36,593,542	\$34.81	9
South Carolina	\$51,675,057	\$4,006,463	\$19,119,437	\$36,221,140	\$113,727,303	\$24.30	26
South Dakota	\$11,181,241	\$2,822,642	\$5,476,728	\$1,273,908	\$23,859,070	\$28.95	19
Tennessee	\$71,807,549	\$20,167,677	\$20,361,265	\$36,652,503	\$152,442,292	\$23.81	28
Texas	\$161,684,595	\$46,048,085	\$56,731,206	\$148,897,665	\$418,058,649	\$16.28	45
Utah	\$20,247,101	\$8,354,820	\$14,908,364	\$6,007,745	\$50,963,666	\$18.09	42
Vermont	\$12,507,558	\$1,559,374	\$4,443,147	\$1,473,998	\$20,750,922	\$33.13	11
Virginia	\$76,845,726	\$12,026,161	\$18,829,813	\$41,142,447	\$152,245,201	\$18.80	38
Washington	\$99,667,041	\$17,528,082	\$15,143,116	\$78,674,879	\$214,720,935	\$31.44	15
West Virginia	\$53,810,876	\$3,181,841	\$12,077,846	\$3,403,152	\$75,730,030	\$40.82	6
Wisconsin	\$26,193,458	\$16,098,561	\$20,229,004	\$13,305,945	\$78,053,432	\$13.67	47
Wyoming	\$17,235,265	\$961,816	\$2,998,793	\$1,114,567	\$23,419,069	\$41.22	4
U.S. TOTAL	\$3,094,603,570	\$678,240,756	\$1,032,079,925	\$2,339,979,009	\$7,401,095,538	\$23.75**	N/A**

\*D.C. was not included in the per capita rankings because total funding for D.C. includes funds for a number of national organizations.

\*\*The US total reflects HRSA grants to all states and D.C.

## APPENDIX F: STATE-BY-STATE FUNDING CHART — CDC

### CDC FUNDING BY STATE

State	PPHF/Other Affordable Care Act	Agency for Toxic Substances and Disease Registry (ATSDR)	Birth Defects and Developmental Disabilities	Cancer	Chronic Disease Prevention/Health Promotion (All Other)	Diabetes	Environmental Health	Heart Disease	HIV/AIDS	Vaccine for Children	Section 317 Immunization Program	Infectious Diseases (All Other)	
Alabama	\$4,491,074	\$0	\$551,055	\$5,483,915	\$1,796,051	\$512,407	\$164,043	\$376,022	\$5,167,179	\$55,388,691	\$3,309,014	\$844,286	
Alaska	\$2,920,582	\$264,250	\$456,933	\$9,439,241	\$623,499	\$514,044	\$0	\$435,420	\$1,615,950	\$10,838,232	\$1,120,749	\$393,987	
Arizona	\$5,367,906	\$255,065	\$1,839,532	\$5,560,231	\$264,587	\$220,332	\$537,316	\$339,654	\$6,091,731	\$80,154,471	\$5,088,873	\$693,366	
Arkansas	\$5,878,794	\$230,787	\$1,776,692	\$3,797,656	\$739,584	\$427,557	\$0	\$985,564	\$2,201,586	\$39,795,202	\$1,982,446	\$408,341	
California	\$41,376,896	\$669,864	\$3,460,051	\$15,199,092	\$3,523,201	\$3,586,866	\$5,621,895	\$841,818	\$71,146,478	\$508,084,654	\$23,527,721	\$3,230,051	
Colorado	\$6,560,347	\$255,150	\$3,129,939	\$7,363,948	\$1,249,821	\$1,208,879	\$224,981	\$315,204	\$8,040,563	\$42,653,709	\$4,271,837	\$1,620,970	
Connecticut	\$6,380,728	\$435,189	\$195,720	\$2,633,368	\$535,946	\$214,344	\$1,031,132	\$350,000	\$7,929,325	\$33,188,107	\$2,029,307	\$1,809,133	
Delaware	\$1,327,645	\$0	\$322,047	\$2,170,288	\$188,864	\$347,337	\$0	\$8,384	\$2,431,768	\$10,418,907	\$684,782	\$397,774	
D.C.	\$7,531,470	\$1,769,368	\$6,968,143	\$2,940,316	\$5,300,105	\$1,697,111	\$2,342,637	\$851,381	\$20,403,268	\$8,496,504	\$1,954,092	\$3,161,642	
Florida	\$8,521,978	\$697,876	\$795,437	\$8,284,288	\$1,219,932	\$849,416	\$1,420,113	\$1,071,106	\$33,077,364	\$189,989,369	\$10,596,079	\$348,975	
Georgia	\$9,473,287	\$274,661	\$159,909	\$10,479,056	\$7,832,590	\$1,212,149	\$1,707,271	\$2,117,198	\$14,701,282	\$135,952,153	\$6,305,521	\$3,846,491	
Hawaii	\$4,022,922	\$0	\$216,996	\$1,776,730	\$232,679	\$295,998	\$700,887	\$147,267	\$2,867,739	\$14,087,536	\$1,551,016	\$379,324	
Idaho	\$1,199,777	\$223,879	\$137,801	\$2,293,492	\$40,000	\$276,946	\$101,878	\$367,070	\$968,203	\$20,081,513	\$1,371,551	\$198,910	
Illinois	\$10,917,637	\$670,531	\$6,036,117	\$9,707,170	\$5,090,150	\$2,124,898	\$1,178,012	\$355,108	\$19,913,910	\$139,513,671	\$7,256,692	\$2,047,812	
Indiana	\$3,443,923	\$0	\$205,650	\$2,930,870	\$183,620	\$352,258	\$965,182	\$0	\$4,015,350	\$65,696,959	\$1,984,348	\$384,537	
Iowa	\$7,713,019	\$0	\$2,464,637	\$4,647,697	\$1,018,823	\$189,288	\$851,507	\$569,600	\$2,402,321	\$25,077,633	\$2,118,483	\$700,463	
Kansas	\$5,429,114	\$0	\$375,000	\$3,504,519	\$1,284,566	\$768,951	\$593,984	\$911,406	\$1,908,165	\$24,031,345	\$2,313,917	\$377,391	
Kentucky	\$3,187,224	\$0	\$343,216	\$4,976,718	\$638,132	\$1,113,584	\$920,077	\$480,000	\$2,329,878	\$44,492,516	\$2,439,464	\$554,505	
Louisiana	\$3,506,072	\$343,969	\$415,763	\$3,786,793	\$1,574,265	\$133,148	\$1,269,927	\$519,650	\$10,105,178	\$67,213,177	\$1,655,487	\$502,809	
Maine	\$5,855,468	\$0	\$157,334	\$3,236,516	\$684,892	\$302,353	\$1,028,595	\$1,101,229	\$2,230,943	\$10,461,885	\$1,837,645	\$292,328	
Maryland	\$9,122,909	\$69,673	\$6,245,908	\$6,033,030	\$5,323,288	\$521,429	\$2,508,390	\$538,295	\$17,008,852	\$60,974,411	\$3,711,870	\$5,031,533	
Massachusetts	\$15,796,254	\$406,895	\$1,827,650	\$4,988,769	\$3,665,791	\$1,205,488	\$1,645,047	\$1,695,325	\$15,072,474	\$60,252,712	\$4,249,896	\$1,914,304	
Michigan	\$6,982,015	\$419,276	\$1,564,464	\$13,689,835	\$3,101,689	\$2,030,232	\$1,695,947	\$990,415	\$10,792,442	\$90,804,476	\$6,435,185	\$1,210,618	
Minnesota	\$11,621,529	\$440,860	\$953,665	\$8,688,311	\$1,947,584	\$819,133	\$2,167,963	\$1,202,289	\$4,454,245	\$36,703,085	\$4,069,793	\$2,525,388	
Mississippi	\$2,692,816	\$0	\$138,246	\$3,479,496	\$219,822	\$347,461	\$918,241	\$3,918,218	\$5,346,325	\$43,353,731	\$2,465,128	\$206,162	
Missouri	\$5,061,104	\$335,895	\$848,413	\$5,978,412	\$1,605,020	\$421,537	\$1,121,300	\$1,321,743	\$5,974,272	\$56,417,831	\$3,516,836	\$1,053,490	
Montana	\$2,434,986	\$2,490,094	\$554,998	\$3,675,061	\$40,000	\$637,840	\$796,924	\$1,239,472	\$1,452,752	\$7,418,976	\$880,697	\$314,205	
Nebraska	\$3,536,140	\$0	\$136,100	\$5,493,110	\$615,146	\$344,259	\$139,750	\$492,679	\$1,847,808	\$21,377,061	\$1,607,380	\$627,774	
Nevada	\$2,271,622	\$0	\$411,018	\$3,662,328	\$810,000	\$265,952	\$591,697	\$125,267	\$3,443,287	\$33,236,067	\$1,550,984	\$551,352	
New Hampshire	\$2,981,122	\$303,659	\$324,900	\$3,494,997	\$215,251	\$406,772	\$840,053	\$0	\$1,532,897	\$8,336,866	\$966,676	\$631,077	
New Jersey	\$5,176,702	\$528,292	\$6,825,976	\$4,362,351	\$228,612	\$485,355	\$966,049	\$184,069	\$21,296,757	\$75,849,599	\$2,866,198	\$465,258	
New Mexico	\$6,865,605	\$999,758	\$130,144	\$4,097,542	\$923,959	\$514,127	\$1,225,836	\$188,812	\$2,835,700	\$35,091,101	\$2,147,898	\$1,512,433	
New York	\$26,502,630	\$993,511	\$5,180,365	\$13,047,024	\$8,037,592	\$887,027	\$3,960,889	\$1,709,050	\$91,949,439	\$221,994,356	\$14,872,933	\$8,568,837	
North Carolina	\$13,253,683	\$339,141	\$3,602,676	\$7,248,411	\$3,051,911	\$1,326,269	\$1,512,355	\$1,894,270	\$8,204,907	\$97,361,800	\$4,970,285	\$708,168	
North Dakota	\$1,256,799	\$0	\$355,703	\$2,030,037	\$382,159	\$319,835	\$99,757	\$336,875	\$941,206	\$5,688,437	\$818,187	\$398,116	
Ohio	\$4,607,032	\$496,592	\$500,782	\$5,698,439	\$1,225,482	\$1,787,338	\$1,194,929	\$953,063	\$7,036,103	\$98,675,172	\$5,059,594	\$3,766,212	
Oklahoma	\$6,050,780	\$0	\$327,750	\$3,861,611	\$602,496	\$920,403	\$838,050	\$241,741	\$3,521,493	\$56,917,111	\$2,726,703	\$430,583	
Oregon	\$5,556,851	\$557,772	\$662,365	\$5,536,369	\$638,844	\$817,980	\$1,928,125	\$342,103	\$3,881,557	\$31,959,508	\$2,863,605	\$1,747,474	
Pennsylvania	\$5,858,209	\$459,685	\$1,409,463	\$5,485,405	\$1,701,219	\$676,819	\$1,094,579	\$0	\$19,307,281	\$107,177,167	\$6,977,893	\$1,345,117	
Rhode Island	\$2,355,850	\$0	\$712,237	\$2,350,004	\$401,458	\$675,997	\$1,419,372	\$335,527	\$2,176,427	\$13,500,850	\$927,932	\$720,997	
South Carolina	\$9,233,726	\$0	\$1,478,538	\$5,502,715	\$2,218,158	\$599,547	\$261,483	\$1,042,216	\$7,658,479	\$48,176,016	\$2,954,250	\$1,005,586	
South Dakota	\$1,774,653	\$0	\$122,472	\$3,723,079	\$39,959	\$229,249	\$0	\$0	\$1,019,538	\$9,172,505	\$690,695	\$376,936	
Tennessee	\$4,019,362	\$280,788	\$1,256,873	\$2,100,332	\$532,319	\$315,033	\$500,000	\$100,044	\$6,435,558	\$72,384,462	\$3,694,035	\$1,959,438	
Texas	\$18,468,737	\$595,070	\$1,567,847	\$9,727,859	\$2,466,449	\$881,488	\$1,341,118	\$316,997	\$35,961,752	\$368,470,821	\$17,472,175	\$1,250,056	
Utah	\$5,202,513	\$288,573	\$2,251,692	\$5,325,001	\$593,373	\$762,511	\$396,000	\$886,949	\$1,711,177	\$22,773,277	\$2,421,979	\$703,849	
Vermont	\$3,999,573	\$0	\$150,000	\$1,749,735	\$490,768	\$312,975	\$915,735	\$24,771	\$1,601,371	\$6,055,559	\$868,184	\$552,453	
Virginia	\$5,638,859	\$349,319	\$396,274	\$5,199,195	\$1,628,866	\$321,678	\$765,444	\$785,691	\$8,325,368	\$56,289,087	\$3,468,518	\$1,307,863	
Washington	\$11,812,063	\$540,552	\$220,257	\$9,807,826	\$1,618,858	\$1,524,240	\$3,231,903	\$1,000,366	\$7,331,703	\$101,108,135	\$4,088,849	\$1,232,033	
West Virginia	\$6,612,483	\$0	\$0	\$5,403,347	\$175,289	\$819,155	\$396,000	\$570,562	\$1,812,622	\$17,786,674	\$1,052,442	\$354,888	
Wisconsin	\$10,694,466	\$517,638	\$992,837	\$4,610,758	\$950,171	\$935,854	\$1,599,909	\$337,256	\$4,279,201	\$45,571,882	\$3,137,509	\$966,057	
Wyoming	\$1,871,534	\$0	\$141,924	\$1,367,789	\$175,000	\$315,576	\$0	\$0	\$906,856	\$5,728,464	\$719,981	\$590,204	
<b>U.S. TOTAL</b>	<b>\$364,418,470</b>	<b>\$17,503,632</b>	<b>\$71,299,509</b>	<b>\$277,630,082</b>	<b>\$79,647,840</b>	<b>\$38,776,425</b>	<b>\$56,732,282</b>	<b>\$34,917,146</b>	<b>\$524,668,030</b>	<b>\$3,442,223,433</b>	<b>\$197,653,314</b>	<b>\$66,221,556</b>	



	Injury Prevention and Control	Nutrition/Physical Activity	Occupational Safety & Health	Influenza (including supplemental funding)	Preventive Health Service Block Grants	Public Health Scientific Services (BRFSS)	School Health	Sexually Transmitted Diseases (STD)	Tobacco	Public Health Preparedness and Emergency Response	Tuberculosis Elimination	CDC Total (All Categories)	CDC Per Capita 2011	CDC Per Capita Ranking
	\$543,390	\$0	\$1,354,873	\$0	\$1,299,655	\$196,750	\$437,071	\$2,531,682	\$1,326,289	\$8,585,696	\$1,069,255	\$95,428,398	\$19.87	30
	\$632,047	\$0	\$86,561	\$0	\$262,961	\$121,141	\$207,671	\$401,442	\$1,662,134	\$5,169,600	\$399,438	\$37,565,882	\$51.98	1
	\$1,010,519	\$0	\$896,837	\$0	\$934,962	\$103,843	\$720,000	\$1,249,811	\$1,281,398	\$12,202,947	\$1,379,549	\$126,192,930	\$19.47	33
	\$327,659	\$198,732	\$0	\$98,048	\$930,442	\$0	\$679,698	\$928,010	\$1,096,919	\$6,490,184	\$536,059	\$69,509,960	\$23.66	18
	\$9,077,880	\$304,641	\$5,340,304	\$0	\$5,504,967	\$185,349	\$2,960,286	\$12,558,750	\$2,827,932	\$61,558,437	\$16,232,315	\$796,819,448	\$21.14	25
	\$3,995,468	\$683,146	\$2,732,632	\$0	\$1,036,423	\$140,091	\$869,660	\$1,756,271	\$1,253,296	\$9,397,930	\$543,390	\$99,303,655	\$19.41	35
	\$416,711	\$23,208	\$657,589	\$0	\$1,111,658	\$344,113	\$592,957	\$831,309	\$1,009,696	\$7,697,107	\$449,685	\$69,866,332	\$19.51	31
	\$310,217	\$5,000	\$0	\$68,532	\$145,956	\$0	\$223,837	\$350,498	\$669,136	\$5,522,932	\$281,176	\$25,875,080	\$28.52	9
	\$1,061,078	\$240,901	\$1,658,772	\$188,088	\$680,676	\$111,138	\$3,143,690	\$2,462,371	\$2,916,500	\$12,330,138	\$577,216	\$88,786,605	N/A	N/A
	\$3,113,286	\$0	\$1,587,841	\$0	\$2,500,964	\$69,544	\$1,438,883	\$3,649,940	\$1,493,816	\$27,257,909	\$7,277,795	\$305,261,911	\$16.02	46
	\$3,401,924	\$151,960	\$855,907	\$59,571	\$2,883,050	\$76,980	\$819,347	\$4,044,678	\$1,090,946	\$18,636,887	\$2,669,663	\$228,752,481	\$23.31	21
	\$299,856	\$331,902	\$0	\$0	\$592,497	\$104,818	\$234,984	\$364,093	\$800,128	\$5,439,616	\$750,636	\$35,197,624	\$25.60	12
	\$159,880	\$0	\$0	\$0	\$288,034	\$97,996	\$482,792	\$396,850	\$1,701,438	\$5,064,052	\$177,962	\$35,630,024	\$22.48	22
	\$3,993,832	\$0	\$2,260,348	\$298,417	\$2,120,278	\$89,387	\$1,145,935	\$3,922,941	\$1,064,167	\$28,062,062	\$2,755,941	\$250,525,016	\$19.47	33
	\$742,055	\$150,000	\$103,575	\$0	\$1,308,717	\$80,722	\$243,845	\$1,682,938	\$1,472,868	\$11,138,909	\$682,466	\$97,768,792	\$15.00	48
	\$1,259,040	\$28,734	\$1,725,749	\$0	\$845,962	\$202,127	\$208,372	\$682,187	\$1,011,630	\$7,310,155	\$352,894	\$61,380,321	\$20.04	29
	\$864,988	\$7,000	\$0	\$0	\$725,326	\$226,577	\$195,344	\$823,327	\$1,285,389	\$6,595,020	\$408,412	\$52,629,741	\$18.33	36
	\$1,504,002	\$24,625	\$689,453	\$0	\$1,036,693	\$280,439	\$259,625	\$939,934	\$1,427,307	\$8,672,367	\$702,061	\$77,011,820	\$17.63	41
	\$608,683	\$586,208	\$175,417	\$0	\$2,205,415	\$94,312	\$153,188	\$1,999,683	\$996,729	\$8,735,663	\$1,283,459	\$107,864,995	\$23.58	20
	\$357,159	\$0	\$100,000	\$0	\$676,899	\$91,622	\$207,016	\$278,245	\$1,143,175	\$4,951,269	\$176,514	\$35,171,087	\$26.48	10
	\$4,133,961	\$0	\$6,729,139	\$896,821	\$1,508,669	\$389,567	\$519,896	\$3,131,749	\$1,222,751	\$14,675,178	\$2,203,605	\$152,500,924	\$26.17	11
	\$2,205,176	\$2,387,641	\$2,492,004	\$0	\$2,081,371	\$112,706	\$165,084	\$2,060,318	\$1,983,559	\$14,913,602	\$1,111,661	\$142,233,727	\$21.59	24
	\$3,826,157	\$878,194	\$2,789,011	\$0	\$3,035,244	\$314,041	\$1,011,438	\$2,766,302	\$2,295,644	\$16,712,103	\$1,038,151	\$174,382,879	\$17.66	40
	\$1,537,645	\$585,050	\$1,523,759	\$0	\$1,981,465	\$142,777	\$580,001	\$1,079,000	\$1,133,740	\$11,430,546	\$1,067,824	\$96,655,652	\$18.08	39
	\$348,489	\$0	\$0	\$0	\$1,109,595	\$87,420	\$594,589	\$1,282,766	\$1,099,391	\$6,419,473	\$749,216	\$74,776,585	\$25.11	13
	\$1,988,646	\$507,000	\$0	\$0	\$2,029,587	\$85,926	\$0	\$2,181,066	\$1,156,517	\$10,717,722	\$584,517	\$102,906,834	\$17.12	43
	\$370,152	\$775,580	\$107,000	\$0	\$500,799	\$146,737	\$213,700	\$248,017	\$959,869	\$4,973,310	\$180,789	\$30,411,958	\$30.47	7
	\$510,330	\$0	\$115,200	\$0	\$1,254,468	\$85,215	\$215,986	\$434,579	\$1,213,833	\$5,150,909	\$213,427	\$45,411,154	\$24.64	16
	\$243,043	\$5,000	\$0	\$0	\$308,678	\$132,068	\$173,618	\$694,721	\$857,089	\$6,492,738	\$573,577	\$56,400,106	\$20.71	26
	\$152,806	\$5,000	\$115,200	\$0	\$1,318,562	\$114,471	\$168,105	\$257,118	\$1,044,019	\$5,390,877	\$231,862	\$28,832,290	\$21.87	23
	\$1,674,222	\$5,000	\$804,866	\$161,078	\$2,231,266	\$147,634	\$842,840	\$3,148,312	\$1,265,532	\$16,334,853	\$3,381,207	\$149,232,028	\$16.92	44
	\$404,234	\$550,942	\$677,904	\$0	\$1,183,460	\$130,786	\$254,468	\$561,639	\$1,133,145	\$6,348,426	\$420,449	\$68,198,368	\$32.75	5
	\$6,254,499	\$2,122,210	\$3,257,685	\$0	\$5,307,171	\$115,110	\$1,645,367	\$9,247,988	\$2,763,936	\$38,848,567	\$6,023,325	\$473,289,511	\$24.31	17
	\$5,047,383	\$1,734,111	\$2,011,355	\$161,821	\$2,312,573	\$136,857	\$816,340	\$2,484,203	\$1,760,684	\$14,998,703	\$1,891,520	\$176,829,426	\$18.31	37
	\$392,142	\$0	\$0	\$0	\$196,165	\$82,720	\$570,000	\$243,494	\$1,116,470	\$5,063,379	\$159,325	\$20,450,806	\$29.90	8
	\$3,093,519	\$0	\$1,702,065	\$0	\$3,479,236	\$78,863	\$432,156	\$3,300,905	\$1,575,449	\$18,080,925	\$1,174,948	\$163,918,804	\$14.20	50
	\$943,683	\$0	\$74,999	\$0	\$731,559	\$85,177	\$302,975	\$908,239	\$1,806,600	\$7,509,542	\$742,304	\$89,543,799	\$23.62	19
	\$1,660,625	\$5,000	\$869,538	\$0	\$569,615	\$157,714	\$207,301	\$1,012,085	\$1,094,341	\$7,960,361	\$616,701	\$70,645,834	\$18.25	38
	\$4,932,813	\$744,138	\$1,997,905	\$578,213	\$3,668,265	\$75,043	\$514,762	\$5,119,415	\$1,312,068	\$20,758,562	\$1,355,582	\$192,549,603	\$15.11	47
	\$1,112,095	\$0	\$0	\$0	\$485,827	\$81,027	\$207,700	\$304,621	\$1,144,904	\$5,302,058	\$319,722	\$34,534,605	\$32.85	4
	\$699,924	\$294,873	\$0	\$0	\$1,027,610	\$131,853	\$533,690	\$1,326,141	\$1,609,109	\$9,321,351	\$1,309,057	\$96,384,322	\$20.60	27
	\$356,310	\$0	\$0	\$0	\$180,390	\$138,062	\$520,170	\$275,330	\$1,445,725	\$5,048,874	\$238,389	\$25,352,336	\$30.76	6
	\$942,160	\$0	\$176,095	\$570,000	\$1,263,217	\$65,643	\$530,616	\$2,180,985	\$1,281,398	\$10,550,748	\$1,483,256	\$112,622,362	\$17.59	42
	\$3,158,658	\$102,140	\$2,141,598	\$0	\$3,298,914	\$95,815	\$1,042,379	\$7,138,335	\$1,795,474	\$36,740,115	\$9,405,307	\$523,439,104	\$20.39	28
	\$807,119	\$0	\$1,224,795	\$158,194	\$736,100	\$124,750	\$5,530	\$458,077	\$1,204,090	\$6,571,486	\$282,821	\$54,889,856	\$19.48	32
	\$76,550	\$0	\$0	\$0	\$208,954	\$65,043	\$218,895	\$178,132	\$1,140,226	\$5,031,972	\$153,000	\$23,793,896	\$37.98	2
	\$2,726,596	\$0	\$1,872,164	\$0	\$1,728,151	\$75,098	\$1,684,273	\$2,270,873	\$1,134,801	\$18,866,451	\$1,322,353	\$116,156,922	\$14.35	49
	\$1,519,356	\$173,478	\$2,271,984	\$0	\$1,057,287	\$159,022	\$919,365	\$3,307,686	\$1,409,523	\$12,486,172	\$1,605,229	\$168,425,887	\$24.66	15
	\$1,290,213	\$410,234	\$291,821	\$118,751	\$684,866	\$0	\$648,469	\$688,170	\$1,170,995	\$5,216,593	\$318,155	\$45,821,729	\$24.70	14
	\$2,498,116	\$17,422	\$395,143	\$0	\$1,507,398	\$108,143	\$709,661	\$953,489	\$1,227,786	\$11,310,910	\$477,245	\$93,798,851	\$16.42	45
	\$62,558	\$0	\$0	\$0	\$173,717	\$130,141	\$199,988	\$222,754	\$1,008,832	\$5,027,379	\$189,938	\$18,832,635	\$33.15	3
	\$88,648,854	\$14,039,070	\$53,867,088	\$3,357,534	\$74,251,714	\$6,412,378	\$31,673,563	\$101,321,469	\$69,898,393	\$625,072,765	\$79,530,348	\$6,319,728,895	\$20.28	

# Endnotes

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The "Action Plan" has been signed onto by a range of public health experts, including Rachel Block, United Hospital Fund; Dr. Georges Benjamin, American Public Health Association; Dr. Jo Ivey Boufford, New York University Wagner; Shannon Brownlee, New America Foundation; Maureen Byrnes, Human Rights Fund (formerly with The Pew Charitable Trusts); Dr. Lawrence Deyton, Veterans Health Administration; Dr. Jonathan Fielding, Los Angeles County Department of Health Services; Dr. David Fleming, The Bill & Melinda Gates Foundation; Dr. C. Earl Fox, University of Miami; Dr. Lawrence Gostin, Georgetown Law Center; Dr. Peggy Hamburg, NTI; Dr. James J. James, American Medical Association; Dr. James Marks, Robert Wood Johnson Foundation; Dr. Dennis O'Leary, Joint Commission on Accreditation of Healthcare Organizations; Dr. Alonzo Plough, The California Endowment; Dr. Kathleen Toomey, Emory University; Dr. Kenneth Warner, University of Michigan.
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1730 M Street, NW, Suite 900  
Washington, DC 20036  
(t) 202-223-9870  
(f) 202-223-9871